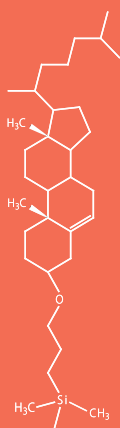
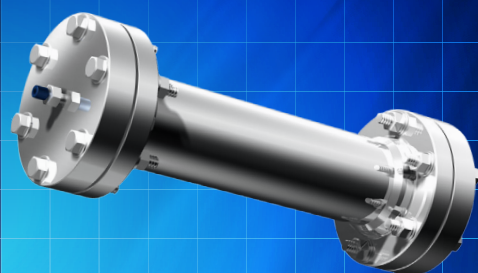
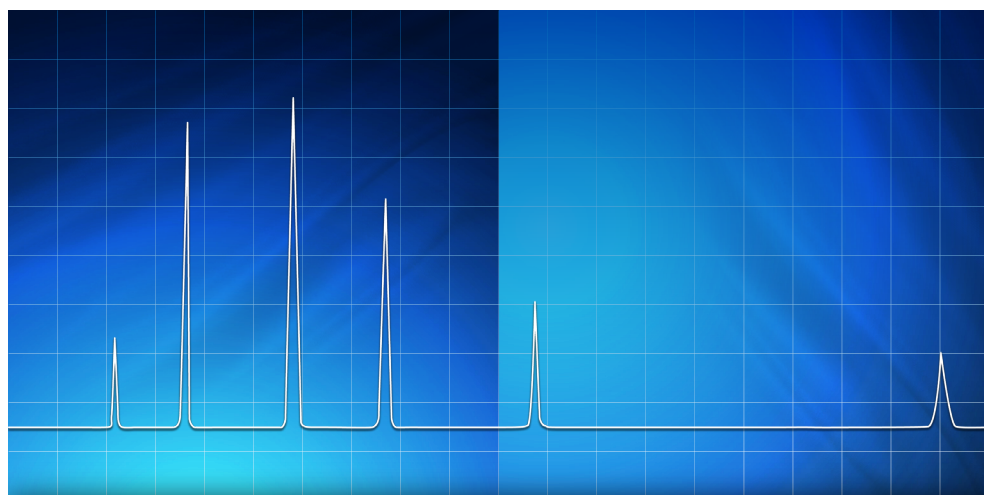


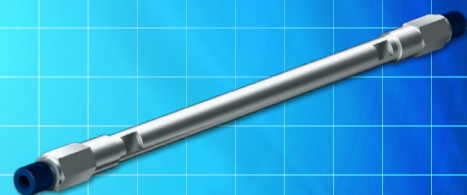
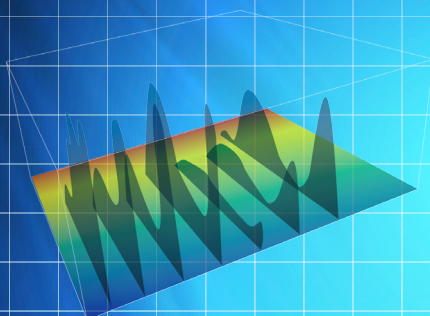
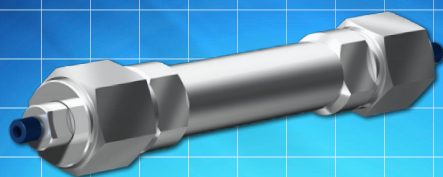
COSMOSIL



COSMOSIL Cholester COSMOCORE Cholester

High Performance Liquid Chromatography

高速液体クロマトグラフィー



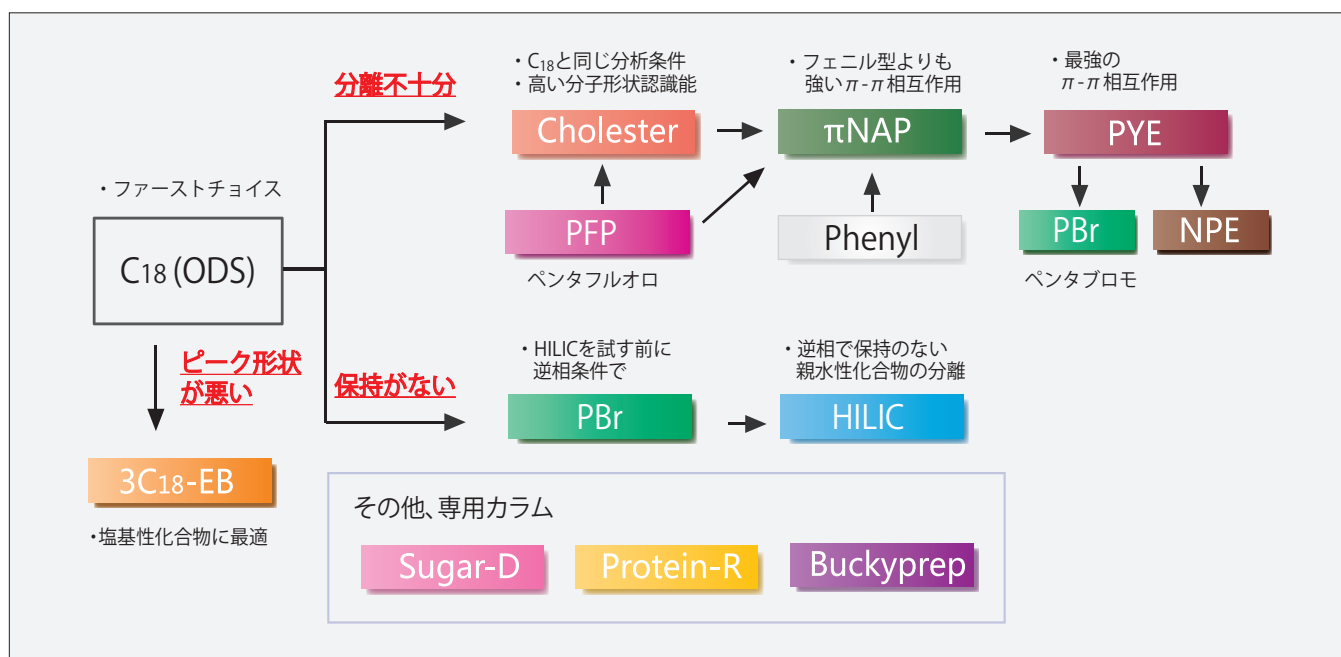
CONTENTS

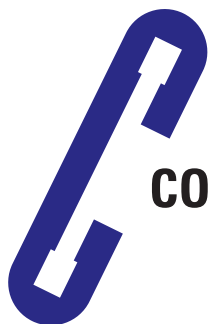
Cholesterの誕生について	2
固定相構造によるカラム選択フロー	2
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Cholester の誕生について

Cholester は、5C₁₈-MS-II、5C₁₈-AR-II と同様の高純度シリカゲルにコレステリル基を化学結合した逆相型の充填剤です。逆相クロマトグラフィーで汎用的に使用される C₁₈ 型カラムは疎水性相互作用が主となり疎水性の認識には優れていますが、疎水性の類似した化合物に対しては分離が困難な場合があります。そのような場合には、選択性の異なる充填剤の使用が有効な手段となります。コスモシルシリーズでは、C₁₈ 型と選択性が異なる充填剤として、 π NAP、NPE、PYE、PBr、といった高機能型充填剤を取り揃えています。しかし、疎水性以外の相互作用を有するカラムは、疎水性が C₁₈ 型カラムと大きく異なるため、分析条件の検討から開始しなければなりません。そこで C₁₈ 型カラムと分析条件が同じでかつ少し異なる分離特性を持つカラムとして Cholester は生まれました。

固定相構造によるカラム選択フロー





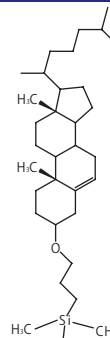
COSMOSIL

コレステリル基結合型カラム

COSMOSIL Cholester / COSMOCORE Cholester

- 優れた分子形状認識能
- C₁₈ カラムと同じ移動相で分析可能
- コレステリル基結合型
- さまざまな粒子径のカラムをラインアップ

固定相構造

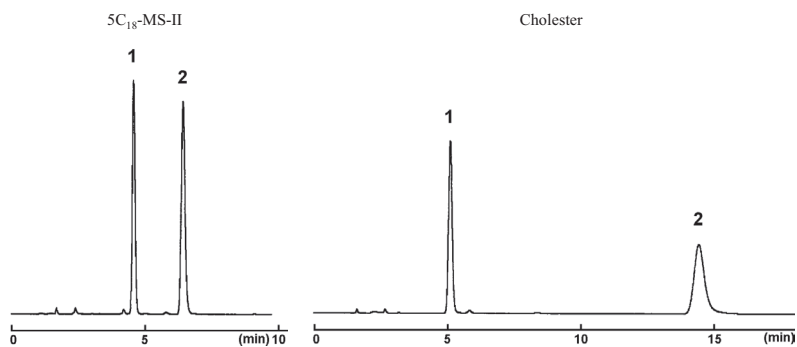


特長 1 C₁₈ カラムよりも優れた分子形状認識能

Cholester は剛直 (Rigid) な固定相構造の効果によって、立体的な *o*-Terphenyl よりも平面的な Triphenylene を非常に強く保持します。

COSMOSIL Application Data

Column: 4.6mm I.D. - 150mm
 Column size: 4.6mm I.D. - 150mm
 Mobile phase: Methanol/H₂O = 90/10
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV254nm
 Sample: 1; *o*-Terphenyl (0.1 μg)
 2; Triphenylene (0.01 μg)



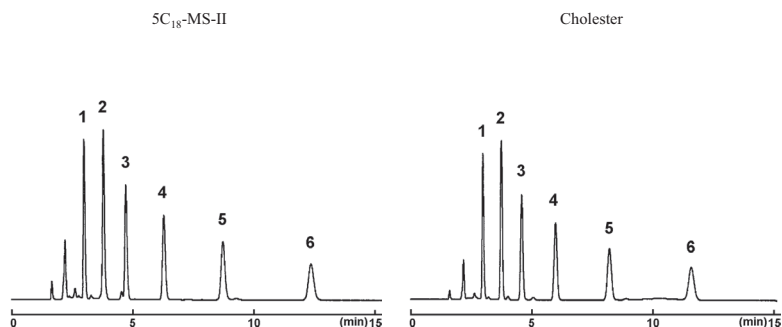
AP-1019

特長 2 C₁₈ カラムと同一移動相で分析可能

Cholester は平均的な C₁₈ カラムと同等の疎水性を有します。これは C₁₈ から Cholester へ移行する際に移動相の条件検討が必要なく、カラムを C₁₈ から Cholester に変えるだけですぐに結果が得られることを示しています。

COSMOSIL Application Data

Column: 4.6mm I.D. - 150mm
 Column size: 4.6mm I.D. - 150mm
 Mobile phase: Methanol/H₂O = 80/20
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV254nm
 Sample: 1; Benzene (1.67 μg)
 2; Toluene (1.67 μg)
 3; Ethylbenzene (1.67 μg)
 4; *n*-Propylbenzene (1.67 μg)
 5; *n*-Butylbenzene (1.67 μg)
 6; Amylbenzene (1.67 μg)



NACALAI TESQUE, INC

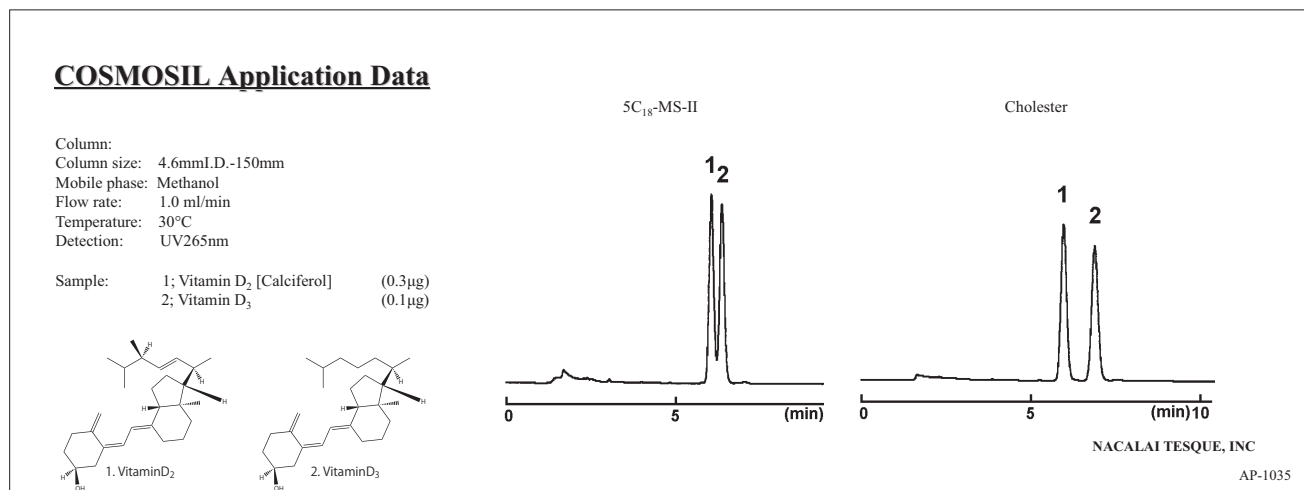
AP-1018

分離特性

Cholestera は、分子形状認識能に優れています。分子の平面性や大きさが異なる化合物の分離に有効なカラムです。

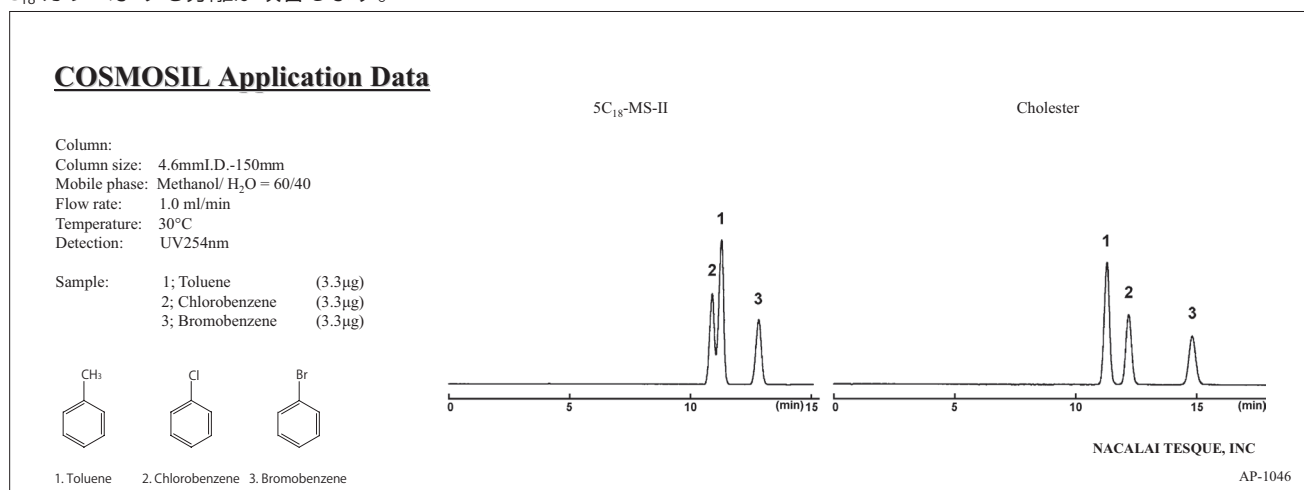
● ビタミン D の分離

ビタミン D は、二重結合の有無により平面性が異なります。Cholestera は、分子の平面性を認識し C₁₈ カラムよりも分離が改善します。



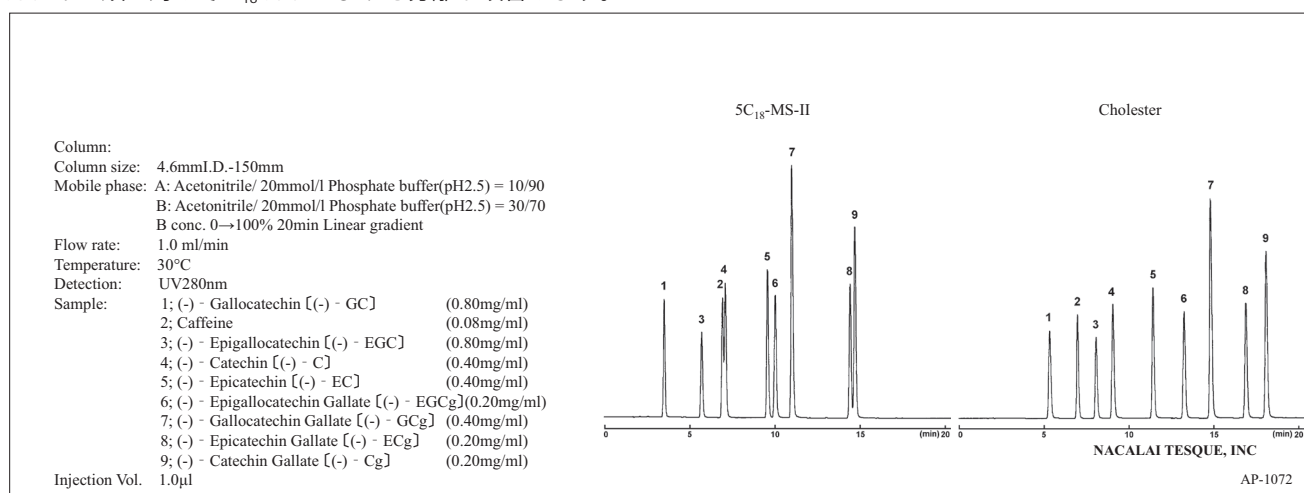
● ハロゲン化合物

Cholestera は、置換基の異なる(メチル基、クロロ基、ブロモ基)一置換ベンゼンを分子の大きさを認識することで、C₁₈ カラムよりも分離が改善します。



● カテキン類

Cholestera は、フェノール性水酸基を有する化合物に対して C₁₈ カラムよりも保持が大きくなる傾向があります。そのため、カテキン類に対して C₁₈ カラムよりも分離が改善します。



ラインアップ

充填剤名称	COSMOSIL Cholester	COSMOSIL 2.5Cholester	COSMOCORE 2.6Cholester
シリカゲル	全多孔性シリカゲル		Core-Shellシリカゲル
平均粒子径	5 μm	2.5 μm	2.6 μm
平均細孔径	約120 Å	約130 Å	約90 Å
比表面積	約300m ² /g	約330m ² /g	約150m ² /g
化学結合基	コレステリル基		
エンドキャップ処理	あり		
使用pH	2～7.5		
カラム耐圧性	20MPa	30MPa	60MPa

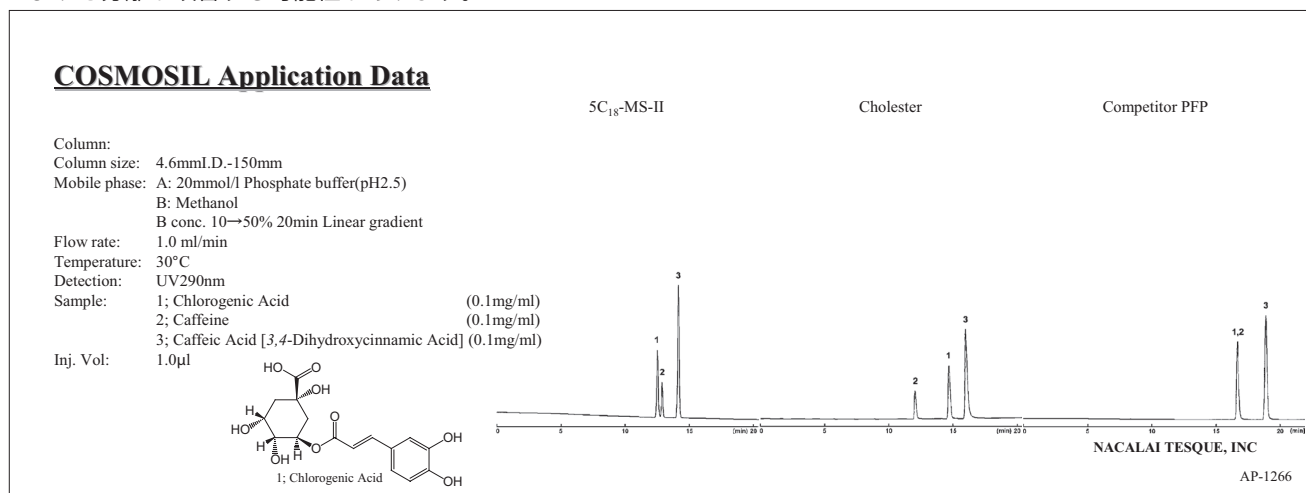
HPLC 用カラム (COSMOSIL Cholester)

コスモシル Cholester は、粒子径 5 μm のフルポーラス担体にコレステリル基を結合しています。分析サイズだけでなく、マイクロサイズから分取サイズまでラインアップしています。

■ COSMOSIL Cholester

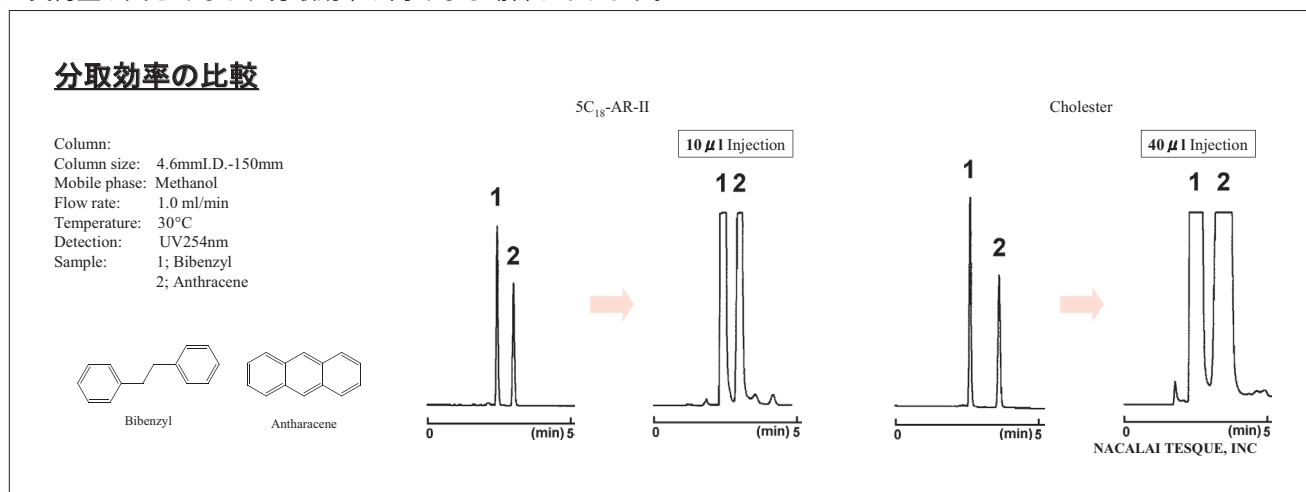
● 他社競合 PFP カラムとの比較

コーヒー豆には有効成分としてクロロゲン酸(ポリフェノールの一種)とカフェインが含まれています。このような天然物や抽出物には、C₁₈ カラムで分離できない成分が数多く存在します。コスモシル Cholester を用いることにより PFP カラムよりも分離が改善する可能性があります。



● 分取サイズまでラインアップ

コスモシル Cholester は、分取サイズまでラインアップしています。C₁₈ カラムよりも分離が改善することによりサンプル負荷量が大きくなり、分取効率が上がる場合があります。



超高速 LC 用カラム (COSMOCORE 2.6Cholester / COSMOSIL 2.5Cholester)

超高速 LC 用カラムとして Core-Shell 担体にコレステリル基を結合したコスモコア 2.6Cholester と、粒子径 $2.5\mu\text{m}$ のフルポーラス担体にコレステリル基を結合したコスモシル 2.5Cholester をラインアップしています。超高速 LC 用 C_{18} カラムで分離不十分な場合、同一条件下で分離が改善する可能性があります。

■ COSMOCORE 2.6Cholester

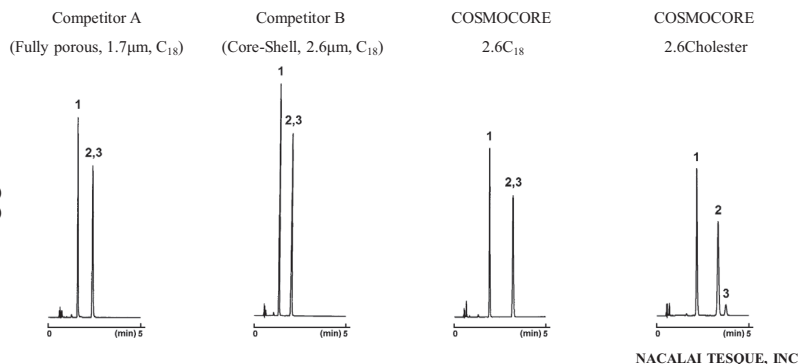
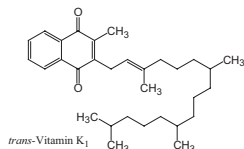
コスモコア 2.6Cholester は、粒子径 $2.6\mu\text{m}$ の Core-Shell 担体にコレステリル基を固定相として有しています。Core-Shell 担体の特性により、フルポーラス Sub- $2\mu\text{m}$ 担体の性能を維持しながら低分析圧力におさえられます。

シス - トランスなどの異性体は各種 C_{18} カラムでの分離が難しい化合物ですが、カラムをコスモコア 2.6Cholester に変更するだけで、移動相条件を変更することなく短時間で分離することができます。

COSMOCORE Application Data

Column: 2.1mm I.D.-100mm
Mobile phase: Methanol
Flow rate: 0.4 ml/min
Temperature: 40°C
Detection: UV280nm

Sample: 1; Vitamin K_2 [Menatetrenone] (0.50mg/ml)
2; *trans*-Vitamin K_1 (0.50mg/ml)
3; *cis*-Vitamin K_1
Inj. Vol: 0.5 μl



AP-1407

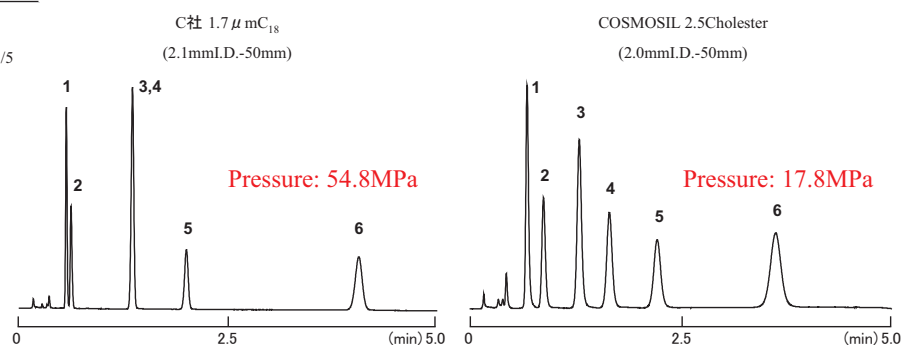
■ COSMOSIL 2.5Cholester

コスモシル 2.5Cholester は、粒子径 $2.5\mu\text{m}$ のフルポーラス担体にコレステリル基を固定相として有しています。フルポーラス担体を採用することにより、粒子径 $5\mu\text{m}$ のフルポーラス担体への移行が容易になります。

サイコサポニン類には構造類似体が存在し C_{18} カラムで分離が難しい化合物ですが、カラムをコスモシル 2.5Cholester に変更するだけで、移動相条件を変更することなく短時間で分離することができます。

COSMOSIL Application Data

Mobile phase: Acetonitrile/ 0.05% NaH_2PO_4 aq. = 3/5
Flow rate: 0.7 ml/min
Temperature: 50°C
Detection: UV206nm
Sample: 1; Saikosaponin c
2; Saikosaponin h
3; Saikosaponin a
4; Saikosaponin b_2
5; Saikosaponin b_1
6; Saikosaponin d
Injection Vol. 1.0 μl

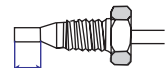
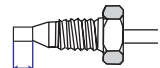


Data courtesy of a customer

● 接続について

接続タイプ		カラム側接続	
		HPLC 型 (コスモシールカラム)	UHPLC 型 (コスモコアカラム)
装置側接続	HPLC 型	接続可能	接続するためにアダプタが必要
	UHPLC 型	接続するためにアダプタが必要	接続可能

HPLC 型：従来の Waters 互換タイプの接続
UHPLC 型：Waters 社 UPLC® 互換タイプの接続

	HPLC 型	UHPLC 型
配管接続部の形状	 約 3.3mm	 約 2.3mm

フェラル先端から出ているチューブの長さが異なります。

● 価格表

● COSMOSIL Cholester Packed Column

サイズ 内径×長さ(mm)	製品番号	価格
1.0×150	05968-71	70,000
1.0×250	05969-61	82,000
2.0× 30	08565-51	45,000
2.0× 50	06352-91	45,000
2.0×100	06948-01	50,000
2.0×150	05971-11	60,000
2.0×250	05972-01	72,000
3.0×150	05973-91	50,000
3.0×250	05974-81	63,000

● COSMOSIL Cholester Guard Column

サイズ 内径×長さ(mm)	製品番号	価格
4.6×10	05975-71	25,000
10×20	05978-41	50,000
20×20	05980-91	110,000
20×50	05981-81	135,000
28×50	05983-61	ご照会

※1 パリテーション対象カラム
※2 3ロット提供カラム

● COSMOCORE 2.6Cholester Packed Column

サイズ 内径×長さ(mm)	製品番号	価格
2.1× 30	12858-91	80,000
2.1× 50	12859-81	84,000
2.1× 75	12860-41	94,000
2.1×100	12861-31	96,000
2.1×150	12862-21	102,000

サイズ 内径×長さ(mm)	製品番号	価格
3.0× 30	12863-11	80,000
3.0× 50	12864-01	84,000
3.0× 75	12866-81	94,000
3.0×100	12867-71	96,000
3.0×150	12868-61	102,000

サイズ 内径×長さ(mm)	製品番号	価格
4.6× 30	12869-51	80,000
4.6× 50	12870-11	84,000
4.6× 75	12871-01	94,000
4.6×100	12872-91	96,000
4.6×150	12873-81	102,000
4.6×250	12875-61	139,000

● COSMOSIL 2.5Cholester Packed Column

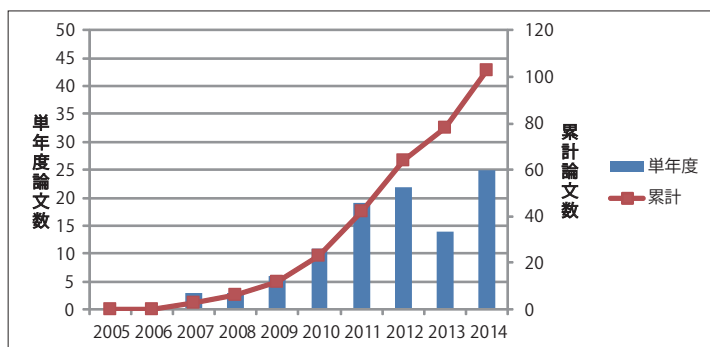
サイズ 内径×長さ(mm)	製品番号	価格
2.0× 50	09000-01	68,000
2.0× 75	09047-11	68,000
2.0×100	09048-01	68,000

サイズ 内径×長さ(mm)	製品番号	価格
3.0× 50	09049-91	68,000
3.0× 75	09050-51	68,000
3.0×100	09051-41	68,000

Cholester 掲載論文

Cholester 掲載論文数

コスモシール Cholester を 2005 年に発売以来、多くの研究者にご愛用いただいています。掲載論文数も 2014 年 7 月現在で 100 報を超えています。(論文数検索：Google Scholar)



図：
コスモシール Cholester およびコスモシール
2.5Cholester の論文数 (論文検索：Google Scholar)

Cholester 掲載論文一覧

分析対象化合物や分析条件については、一部を掲載しています。詳細については、論文をご確認ください。

医薬化学

No	著者	タイトル	論文	分析対象化合物	移動相	検出
1	Keita Kato, Nobukazu Shitan, Tsubasa Shoji, Takashi Hashimoto	Tobacco NUP1 transports both tobacco alkaloids and vitamin B6	Phytochemistry 113 (2015) 33-40	Vitamin B6 (Pyridoxamine/Pyridoxine/Pyridoxal)	25mmol/l Phosphate Buffer (pH4.0)	fluorescence detector (Ex. 328nm, Em. 393nm)
				Adenine	20mmol/l Phosphate Buffer (pH7.0)	UV 254nm
2	Ehsan Nazifi, Naoki Wada, Tomoya Asano, Takumi Nishiuchi, Yoshiaki Iwamuro, Satoshi Chinaka, Seiichi Matsugo, Toshio Sakamoto	Characterization of the chemical diversity of glycosylated mycosporine-like amino acids in the terrestrial cyanobacterium <i>Nostoc commune</i>	Journal of Photochemistry and Photobiology B: Biology 142 (2015) 154-168	Mycosporine-like amino acids	Methanol/0.1% Acetic Acid-water = 10/90	UV 330nm
3	Hisashi Yagi, Yuki Abe, Naoto Takayanagi, Yuji Goto	Elongation of amyloid fibrils through lateral binding of monomers revealed by total internal reflection fluorescence microscopy	Biochimica et Biophysica Acta 1844 (2014) 1881-1888	IAPP-Alexa532	Acetonitrile/0.05%TFA-water=20/80 → 60/40 (Gradient,45min)	—
4	Tingli Bai, Daozhong Zhang, Shuangjun Lin, Qingshan Long, Yemin Wang, Hongyu Ou, Qianjin Kang, Zixin Deng, Wen Liu, Meifeng Tao	Operon for Biosynthesis of Lipstatin, the Beta-Lactone Inhibitor of Human Pancreatic Lipase	Appl. Environ. Microbiol. December 2014 vol. 80 no. 24 7473-7483	Lipstatin	A:Water B:Methanol B conc. 80% (0-10min), 80 → 90% (10-11min), 90% (11-20min), 90 → 100% (20-21min), 100% (21-25min), 100 → 80% (25-26min), 80% (26-35min)	UV 210nm LC/MS
5	Farshad Homayouni Moghadam, Maryam Dehghan, Ehsan Zarepur, Reyhaneh Dehlavi, Fatemeh Ghasemina, Shima Ehsani, Golnaz Mohammadzadeh, Kazem Barzegar	Oleo gum resin of <i>Ferula assa-foetida</i> L. ameliorates peripheral neuropathy in mice	Journal of Ethnopharmacology 154 (2014) 183-189	Free Ferulic acid/ Umbelliferone/Foetidin	Methanol/Water=80/20	UV 290-310nm
6	Kei Takahashi, Yuki Oda, Yasuyuki Toyoda, Tatsuki Fukami, Tsuyoshi Yokoi, Miki Nakajima	Regulation of Cytochrome <i>b₅</i> Expression by miR-223 in Human Liver: Effects on Cytochrome P450 Activities	Pharm Res (2014) 31:780-794	6β-Hydroxytestosterone	Methanol/10mmol/l Potassium Phosphate Buffer (pH 7.4) = 50/50	UV 240nm

■ 医薬化学つづき

No	著者	タイトル	論文	分析対象化合物	移動相	検出
7	Shinya Yoshida, Atsushi Ohigashi, Yasuhiro Morinaga, Norio Hashimoto, Takumi Takahashi, Shigeru Ieda, and Minoru Okada	Development of a Practical and Scalable Synthesis of the Side Chain for ASP9726, a Successor of Micafungin	<i>Org. Process Res. Dev.</i> 2013, 17, 1252 – 1260	<i>cis/trans</i> - Methyl 4-[5-[4-(4-Cyclohexyl-4-methoxypiperidin-1-yl)phenyl]-1,3,4-thiadiazol-2-yl]cyclohexane-1-carboxylate	Acetonitrile/50mmol/l Perchloric Acid Buffer (pH2.0) =75/25	UV 254nm
8	A. S. Angie Ng and R. Manjunatha Kini	Structural Determinants in Protein Folding: A Single Conserved Hydrophobic Residue Determines Folding of EGF Domains	<i>ACS Chem. Biol.</i> 2013, 8, 161–169	t-TMEGF4 peptides t-TMEGF4-Y25T peptides	Methanol/0.1%TFA-water, gradient Methanol/10mmol/l Heptafluorobutyric Acid(HFBA)-water gradient	—
9	Naomi Ohno, Emi Yoshigai, Tetsuya Okuyama, Yuka Yamamoto, Tadayoshi Okumura, Kenji Sato, Yukinobu Ikeya, and Mikio Nishizawa	Chlorogenic acid from the Japanese herbal medicine Kinginka (<i>Flos Lonicerae japonicae</i>) suppresses the expression of inducible nitric oxide synthase in rat hepatocytes	<i>HOAJ Biology</i> 2012	Chlorogenic acid	A:5%Acetic Acid-water B:Acetonitrile B conc. 10 → 50%, 35min linear gradient	UV 254nm
10	Young-Sil Lee, Byung-Yoon Cha, Kiyoto Saito, Hiroshi Yamakawa, Sun-Sil Choi, Kohji Yamaguchi, Takayuki Yonezawa, Toshiaki Teruya, Kazuo Nagai, Je-Tae Woo	Nobiletin improves hyperglycemia and insulin resistance in obese diabetic <i>ob/ob</i> mice	<i>Biochemical Pharmacology</i> 79 (2010) 1674–1683	Nobiletin	Methanol/0.1%TFA-water=75/25	UV 260nm
11	Shizuma Ishikawa, Takahiro Taira, Takeshi Niki, Kazuko Takahashi-Niki, Chinatsu Maita, Hiroshi Maita, Hiroyoshi Ariga and Sanae M. M. Iguchi-Arigo	Oxidative Status of DJ-1-dependent Activation of Dopamine Synthesis through Interaction of Tyrosine Hydroxylase and 4-Dihydroxy-L-phenylalanine (L-DOPA) Decarboxylase with DJ-1	<i>THE JOURNAL OF BIOLOGICAL CHEMISTRY</i> VOL. 284, NO. 42, pp. 28832–28844, October 16, 2009	L-DOPA	Methanol/50mmol/l Potassium Phosphate (pH2.6), 0.1mmol/l EDTA, 0.2mmol/l Heptane Sulfonic Acid=10/90	—

■ 放射線化学

No	著者	タイトル	論文	分析対象化合物	移動相	検出
12	Masaaki Suzuki, Misato Takashima-Hirano, Hideki Ishii, Chika Watanabe, Kengo Sumi, Hiroko Koyama, Hisashi Doi	Synthesis of ¹¹ C-labeled retinoic acid, [¹¹ C]ATRA, via an alkenylboron precursor by Pd(0)-mediated rapid C-[¹¹ C]methylation	<i>Bioorganic & Medicinal Chemistry Letters</i> 24 (2014) 3622–3625	[¹¹ C]ATRA (¹¹ C-incorporated all- <i>trans</i> -retinoic Acid)	Acetonitrile/0.2%Formic Acid-water=90/10	UV 360nm
13	Kazunori Kawamura, Tomoteru Yamasaki, Katsushi Kumata, Kenji Furutsuka, Makoto Takei, Hidekatsu Wakizaka, Masayuki Fujinaga, Kaori Kariya, Joji Yui, Akiko Hatori, Lin Xie, Yoko Shimoda, Hiroki Hashimoto, Kazutaka Hayashi, Ming-Rong Zhang	Binding potential of (E)-[¹¹ C]ABP688 to metabotropic glutamate receptor subtype 5 is decreased by the inclusion of its ¹¹ C-labelled Z-isomer	<i>Nuclear Medicine and Biology</i> 41 (2014) 17–23	E/Z-[¹¹ C]ABP688	Acetonitrile/Water=50/50	UV 310nm/ Radiation detector
14	Kazutaka Hayashi, Akiko Tachibana, Shusaku Tazawa, Yosuke Mizukawa, Katsuhiko Osaki, Yoko Morimoto, Riyo Zochi, Masahiro Kurahashi, Hatsumi Aki, and Kazuhiro Takahashi	Preparation and stability of ethanol-free solution of [¹⁸ F]florbetapir ([¹⁸ F]AV-45) for positron emission tomography amyloid imaging	<i>J. Label Compd. Radiopharm</i> 2013, 56, 295–300	[¹⁸ F]florbetapir ([¹⁸ F]AV-45)	Acetonitrile/50mmol/l Ammonium Acetate (pH4.6 with Acetic acid)/25% Ascorbic Acid-water = 260/238/2	UV 320nm
15	Makoto Kataoka, Tadayuki Takashima, Tomotaka Shingaki, Yoshinobu Hashidzume, Yumiko Katayama, Yasuhiro Wada, Hiroyuki Oh, Yoshie Masaoka, Shinji Sakuma, Yuichi Sugiyama, Shinji Yamashita, Yasuyoshi Watanabe	Dynamic Analysis of GI Absorption and Hepatic Distribution Processes of Telmisartan in Rats Using Positron Emission Tomography	<i>Pharm Res</i> (2012) 29:2419-2431	[¹¹ C]Telmisartan	Acetonitrile/10mmol/l Ammonium Acetate (pH4.5 with Formic acid) = 55/45	—
16	Kazutaka Hayashi, Kenji Furutsuka, Takehito Ito, Masatoshi Muto, Hatsumi Aki, Toshimitsu Fukumura, and Kazutoshi Suzuki	Fully automated synthesis and purification of 4-(2'-methoxyphenyl)-1-[2'- (N-2"-pyridinyl)-p-[¹⁸ F]fluorobenzamido] ethylpiperazine	<i>J. Label Compd. Radiopharm</i> 2012, 55, 120-124	p-[¹⁸ F]MPPF/p-MPPNO ₂	Acetonitrile/25mmol/l Ammonium Acetate/Acetic Acid = 200/300/0.15	UV 274nm

放射線化学つづき

No	著者	タイトル	論文	分析対象化合物	移動相	検出
17	Tadayuki Takashima, Yoshinobu Hashizume, Yumiko Katayama, Machiko Murai, Yasuhiro Wada, Kazuya Maeda, Yuichi Sugiyama, and Yasuyoshi Watanabe	The Involvement of Organic Anion Transporting Polypeptide in the Hepatic Uptake of Telmisartan in Rats: PET Studies with [¹¹ C]Telmisartan	<i>Mol. Pharmaceutics</i> 2011, 8, 1789–1798	[¹¹ C]Telmisartan/ Telmisartan	Acetonitrile/10mmol/l Ammonium Acetate (pH4.5) = 55/45	—
18	Hitoshi Iimori, Yoshinobu Hashizume, Masahiro Sasaki, Yoshinobu Kajiura, Yuichi Sugimoto, Yuichi Sugiyama, Yasuyoshi Watanabe, Michio Senda	First automatic radiosynthesis of ¹¹ C labeled Telmisartan using a multipurpose synthesizer for clinical research use	<i>Ann Nucl Med</i> (2011) 25:333–337	[¹¹ C]Telmisartan	Acetonitrile/10mmol/l Sodium Dihydrogenphosphate Dihydrate=70/30	UV 254nm / Radiation detector
19	Kayo Takahashi, Gen Yamagishi, Toshiyuki Hiramatsu, Ayako Hosoya, Kayo Onoe, Hisashi Doi, Hiroko Nagata, Yasuhiro Wada, Hirotaka Onoe, Yasuyoshi Watanabe, Takamitsu Hosoya	Practical synthesis of precursor of [<i>N-methyl</i> - ¹¹ C]vorozole, an efficient PET tracer targeting aromatase in the brain	<i>Bioorganic & Medicinal Chemistry</i> 19 (2011) 1464–1470	[<i>N-methyl</i> - ¹¹ C] Vorozole/ Norvorozole	—	—

微生物化学

No	著者	タイトル	論文	分析対象化合物	移動相	検出
20	Ryosuke Sugiyama, Shinichi Nishimura, Taro Ozaki, Shumpei Asamizu, Hiroyasu Onaka, and Hideaki Kakeya	5-Alkyl-1,2,3,4-tetrahydroquinolines, New Membrane-Interacting Lipophilic Metabolites Produced by Combined Culture of <i>Streptomyces nigrescens</i> and <i>Tsukamurella pulmonis</i>	<i>Org. Lett.</i> 2015, 17, 1918–1921	5-Alkyl-1,2,3,4-tetrahydroquinolines (5aTHQs)	Methanol/Water=90/10	UV 254nm
21	Naoya Oku, Shouhei Matoba, Yohko Momose Yamazaki, Ryoko Shimasaki, Satoshi Miyayama, and Yasuhiro Igarashi	Complete Stereochemistry and Preliminary Structure–Activity Relationship of Rakicidin A, a Hypoxia-Selective Cytotoxin from <i>Micromonospora</i> sp.	<i>J. Nat. Prod.</i> 2014, 77, 2561–2565	Rakicidin A/Rakicidin B/ Rakicidin E TetrahydroRakicidin A	Acetonitrile/Water=70/30 Acetonitrile/Water, Gradient	UV 280nm UV 210nm

生薬学

No	著者	タイトル	論文	分析対象化合物	移動相	検出
22	Yukiko Yamashita-Higuchi, Sachiko Sugimoto, Katsuyoshi Matsunami, Hideaki Otsuka, and Takahito Nakai	Grevillosides J–Q, Arbutin Derivatives from the Leaves of <i>Grevillea robusta</i> and Their Melanogenesis Inhibitory Activity	<i>Chem. Pharm. Bull.</i> 62(4) 364–372 (2014)	Grevillosides L	—	—
23	Tadahiro Yahagi, Naoyuki Yakura, Keiichi Matsuzaki, Susumu Kitanaka	Inhibitory effect of chemical constituents from <i>Artemisia scoparia</i> Waldst. et Kit. on triglyceride accumulation in 3T3-L1 cells and nitric oxide production in RAW 264.7 cells	<i>J Nat Med</i> (2014) 68:414–420	—	—	—
24	Xiaoyan Cui, Yoshinori Inagaki, Dongliang Wang, Jianjun Gao, Fanghua Qi, Bo Gao, Norihiro Kokudo, Dingzhi Fang, Wei Tang	The supercritical CO ₂ extract from the skin of <i>Bufo bufo gargarizans</i> Cantor blocks hepatitis B virus antigen secretion in HepG2.2.15 cells	<i>BioScience Trends.</i> 2014; 8(1):38–44.	Resibufogenin/ Cinobufagin	Acetonitrile/Water=45/55	UV 200–400nm
25	Kouki Ukida, Takashi Doi, Sachiko Sugimoto, Katsuyoshi Matsunami, Hideaki Otsuka, and Yoshio Takeda	Schoepfijasmins A–H: C-Glycosyl Dihydrochalcones, Dihydrochalcone Glycoside, C-Glucosyl Flavanones, Flavanone Glycoside and Flavone Glycoside from the Branches of <i>Schoepfia jasminodora</i>	<i>Chem. Pharm. Bull.</i> 61(11) 1136–1142 (2013)	Schoepfijasmin F	Methanol/Water=30/70	—

■ 生薬学つづき

No	著者	タイトル	論文	分析対象化合物	移動相	検出
26	Jiang Liu, Seikou Nakamura, Yan Zhuang, Masayuki Yoshikawa, Ghazi Mohamed Eisa Hussein, Kyohei Matsuo, and Hisashi Matsuda	Medicinal Flowers. XXXX. Structures of Dihydroisocoumarin Glycosides and Inhibitory Effects on Aldose Reductase from the Flowers of <i>Hydrangea macrophylla</i> var. <i>thunbergii</i>	Chem. Pharm. Bull. 61(6) 655-661 (2013)	Neochlorogenic acid/3-O- <i>trans-p</i> -coumaroyl-D-quinic acid/3-O- <i>cis-p</i> -coumaroyl-D-quinic acid/chlorogenic acid/taxiphyllin/umbelliferone glucoside/ α -morroniside	Methanol/Water=20/80	—
				hydrangenol 8-O- β -D-glucopyranoside/chlorogenic acid methyl ester	Methanol/Water=30/70	
				4-hydroxythunberginol G 3'-O- β -D-glucopyranoside/hydrangenol 8-O- β -D-glucopyranoside/ <i>trans-p</i> -coumaric acid	Methanol/Water=40/60	
				thunberginol G 8-O- β -D-glucopyranoside/thunberginol C 8-O- β -D-glucopyranoside/(3 <i>R</i>)-phyllodulcin 8-O- β -D-glucopyranoside	Methanol/Water=40/60	
				florahydroside I/florahydroside II/thunberginol D 3'-O- β -D-glucopyranoside/(3 <i>S</i>)-phyllodulcin 8-O- β -D-glucopyranoside/(+)-hydrangenol 4'-O- β -D-glucopyranoside/thunberginol G 3'-O- β -D-glucopyranoside	Methanol/Water=40/60	
27	Yoshiaki Amakura, Morio Yoshimura, Saori Yamakami, Takashi Yoshida	Isolation of phenolic constituents and characterization of antioxidant markers from sunflower (<i>Helianthus annuus</i>) seed extract	Phytochemistry Letters 6 (2013) 302-305	Benzyl alcohol β -D-apiofuranosyl-(1 $\rightarrow$ 6)- β -D-(4-O-caffeoyl) glucopyranoside hydrolyzed	10mmol/l Phosphoric Acid/10mmol/l Potassium Dihydrogenphosphate/Methanol=37.5/37.5/25	UV 280nm
28	Tetsuro Ito, Yasumasa Hara, Masayoshi Oyama, Toshiyuki Tanaka, Jin Murata, Dedy Darnaedi, Munekazu Iinuma	Occurrence of bergenin phenylpropanoates in <i>Vatica bantamensis</i>	Phytochemistry Letters 5 (2012) 743-746	Bergenin 11-O-(<i>E</i>)-ferulate/Bergenin 11-O-(<i>Z</i>)-ferulate	Methanol/Water=70/30	UV 260nm
29	Shin-ichi Kurimoto, Kyoko Suzuki, Mamoru Okasaka, Yoshiki Kashiwada, Olimjon K. Kodzhimatov, Yoshihisa Takaishi	New sesquiterpene lactone glucosides from the roots of <i>Ferula varia</i>	Phytochemistry Letters 5 (2012) 729-733	* 分析対象化合物に関して論文をご参照ください	Methanol/Water=30/70	—
30	Makio Shibano, Ayaka Misaka, Kayoko Sugiyama, Masahiko Taniguchi, Kimiye Baba	Two secopregnane-type steroidal glycosides from <i>Cynanchum stauntonii</i> (Decne.) Schltr. ex Levl.	Phytochemistry Letters 5 (2012) 304-308	Stauntonosaponin A/Hirundoside A/Glaucogenin C mono-D-thevetoside/Glaucogenin C/Cynatratoside A	Methanol/Water = 60/40	UV 230nm
				Stauntonosaponin B/anhydrohirundigenin monothevetoside		
31	Yoshiaki Amakura, Ayako Yoshimura, Morio Yoshimura and Takashi Yoshida	Isolation and Characterization of Phenolic Antioxidants from Plantago Herb	Molecules 2012, 17, 5459-5466	2-(3,4-Dihydroxyphenyl) ethyl 3-O- β -D-allopyranosyl-6-O-caffeoyl- β -D-glucopyranoside	Methanol/10mmol/l Phosphoric Acid/10mmol/l Potassium Dihydrogenphosphate =25/37.5/37.5	UV 280nm
32	Ken-ichi Nakashima, Masayoshi Oyama, Tetsuro Ito, Yukihiko Akao, Joko Ridho Witono, Dedy Darnaedi, Toshiyuki Tanaka, Jin Murata, Munekazu Iinuma	Novel quinolinone alkaloids bearing a lignoid moiety and related constituents in the leaves of <i>Melicope denhamii</i>	Tetrahedron 68 (2012) 2421-2428	Melicodin A/Melicodin B/Isoevodionol/Evodionol methyl ether	Acetonitrile/Water=42/58	—
				Melicodin C/Melicodenine B	Acetonitrile/Water=48/52	
				Melicodenine F	Methanol/Water=70/30	
				Melicodenine D/Melicobisquinolinone B	Acetonitrile/Water=50/50	
33	Tadahiro Yahagi, Akihiro Daikonya, and Susumu Kitanaka	Flavonol Acylglycosides from Flower of <i>Albizia julibrissin</i> and Their Inhibitory Effects on Lipid Accumulation in 3T3-L1 Cells	Chem. Pharm. Bull., 60 (1), 129-136, 2012	Flavonol Acylglycosides	—	—

■ 生薬学つづき

No	著者	タイトル	論文	分析対象化合物	移動相	検出
34	Juan Xiong, Yoshiki Kashiwada, Chin-Ho Chen, Keduo Qian, Susan L. Morris-Natschke, Kuo-Hsiung Lee, Yoshihisa Takaishi	Conjugates of betulin derivatives with AZT as potent anti-HIV agents	Bioorganic & Medicinal Chemistry 18 (2010) 6451–6469	Betulin derivatives with AZT 1-(3'-Azido-3'-deoxythymidine-5'-yl)-4-[3-O-(4'-benzhydryloxy-3',3'-dimethylsuccinyl)-lup-20(29)en-28-yl] 2,2-dimethylsuccinate [No.36]/4-(3'-Azido-3'-deoxythymidine-5'-yl)-1-[3-O-(4'-benzhydryloxy-3',3'-dimethylsuccinyl)-lup-20(29)en-28-yl] 2,2-dimethylsuccinate [No.37] 1-(3'-Azido-3'-deoxythymidine-5'-yl)-4-[3-O-(4'-benzhydryl-3',3'-dimethylsuccinyl)-lup-28-yl] 2,2-dimethylsuccinate [No.41]/4-(3'-Azido-3'-deoxythymidine-5'-yl)-1-[3-O-(4'-benzhydryl-3',3'-dimethylsuccinyl)-lup-28-yl] 2,2-dimethylsuccinate [No.42] 1-(3'-Azido-3'-deoxythymidine-5'-yl)-4-[3-O-(4'-benzhydryloxyglutaryl)-lup-28-yl] 2,2-dimethylsuccinate [No.44]/4-(3'-Azido-3'-deoxythymidine-5'-yl)-1-[3-O-(4'-benzhydryloxyglutaryl)-lup-28-yl] 2,2-dimethylsuccinate [No.45]	Methanol/Water=97/3 Methanol/Water=97/3 Methanol/Water=97/3	—
35	DONG-LIANG WANG, FANG-HUA QI, HUAN-LI XU, YOSHINORI INAGAKI, YUTAKA ORIHARA, KAZUHISA SEKIMIZU, NORIHIRO KOKUDO, FENG-SHAN WANG, and WEI TANG	Apoptosis-inducing activity of compounds screened and characterized from cinobufacini by bioassay-guided isolation	Molecular Medicine REREPORTS 3: 717-722, 2010	Resibufogenin/ Cinobufagin	Acetonitrile/Water=45/55	UV 296nm

■ 公衆衛生学

No	著者	タイトル	論文	分析対象化合物	移動相	検出
36	Tomohiro Hasei, Masumi Sakaguchi, Maki Yoneda, Mitsuhiro Wada, Shuhei Miyagawa, Kana Kobayashi, Takashi Fukuda, Saori Arita, Fumikazu Ikemori, Tetsushi Watanabe	Development of an Analytical Method for Strong Mutagens/ Carcinogens, 3,9-Dinitrofluoranthene and Dinitropyrene Isomers, in the Environment and Their Particle-Size Distribution in Airborne Particles	Chromatographia (2015) 78:55-63	3,9-dinitrofluoranthene (DNF)/ 1,3-dinitropyrene (1,3-DNP)/ 1,8-dinitropyrene (1,8-DNP)/ 1,6-dinitropyrene (1,6-DNP)	Methanol/Water=80/20	UV 254nm

■ 食品化学

No	著者	タイトル	論文	分析対象化合物	移動相	検出
37	ASAMI IKEDA, HAYATO ICHINO, SAORI KIGUCHIYA, PETROS CHIGWECHOKHA, MASA HARU KOMATSU and KAZUHIRO SHIOZAKI	EVALUATION AND IDENTIFICATION OF POTENT ANGIOTENSIN-I CONVERTING ENZYME INHIBITORY PEPTIDE DERIVED FROM DWARF GULPER SHARK (<i>CENTROPHORUS ATROMARGINATUS</i>)	Journal of Food Processing and Preservation 39 (2015) 107–115	Hippuric acid	Methanol/10mmol/l Potassium Dihydrogenphosphate (pH3.0)=50/50	UV 230nm
38	Takashi Kobayashi, Akane Ogino, Yasuhito Miyake, Hajime Mori, Asao Hosoda, Muneki Fujita, Takuo Tsuno, Shuji Adachi	Lipase-Catalyzed Esterification of Triterpene Alcohols and Phytosterols with Oleic Acid	J Am Oil Chem Soc (2014) 91:1885-1890	Oleic acid esters of Phytosterols/ Triterpene alcohols	Methanol LWT - Food Science and Technology 58 (2014) 222–229 2-Propanol/Methanol=2/1	UV 205nm
39	Wakako Tsuzuki, Yasuhiro Suzuki, Sumiyo Yamada, Shuuichi Kano, Hideo Ohnishi, Takeshi Fujimoto, Akira Horigane	Effect of oxygen absorber on accumulation of free fatty acids in brown rice and whole grain wheat during storage	LWT - Food Science and Technology 58 (2014) 222–229	Fluorescence-labeled Fatty Acids derivatives (C16:0/C18:0/C18:1/C18:2)	Acetonitrile	fluorescence detector (Ex. 365nm, Em. 425nm)

■ 食品化学つづき

No	著者	タイトル	論文	分析対象化合物	移動相	検出
40	Honest N. Kessy, Lianfu Zhang & Huanwei Zhang	Lycopene (Z) – isomers enrichment and separation	International Journal of Food Science and Technology 2013, 48, 2050–2056	E/Z-Lycopene	Acetonitrile/THF=90/10	UV 472nm
41	Hideaki KITAMI, Yoshimi ISHIIHARA, Jiro TAKANO	Determination of Eight Kinds of Catechins in Bottled Green-tea Drinks by HPLC on a Cholesteryl Group Stationary Phase Column	BUNSEKI KAGAKU Vol. 62, No. 9, pp. 835-840 (2013)	(+)-Catechin/ (-)-Epicatechin/ (-)-Gallocatechin/ (-)-Epigallocatechin/ (-)-Catechin gallate/ (-)-Epicatechin gallate/ (-)-Gallocatechin gallate/ (-)-Epigallocatechin gallate	Acetonitrile/20mmol/l Phosphoric Acid=10/90	UV 230nm
42	Yoko Yamashita, Lihua Wang, Zhang Tinsun, Toshiyuki Nakamura, and Hitoshi Ashida	Fermented Tea Improves Glucose Intolerance in Mice by Enhancing Translocation of Glucose Transporter 4 in Skeletal Muscle	J. Agric. Food Chem. 2012, 60, 11366–11371	Catechin/Epicatechin/ Gallocatechin/ Epigallocatechin/Catechin gallate/ Epicatechin gallate/ Gallocatechin gallate/ Epigallocatechin gallate/ Theaflavin/ Theaflavin-3-gallate/Theaflavin-3'-gallate/ Theaflavin-3,3'-digallate	A: 0.1%Formic Acid-water B: Acetonitrile B Bonc. 0% (0-2min), 0 → 30% (2-20min), 30 → 50% (20-30min), 50 → 100% (30-40min), 0% (40-41min), 0% (41-48min)	—
43	Michiko Myose, Tsutomu Warashina, and Toshio Miyase	Triterpene Saponins with Hyaluronidase Inhibitory Activity from the Seeds of <i>Camellia sinensis</i>	Chem. Pharm. Bull. 60(5) 612–623 (2012)	Camelliasaponin A ₁ / Theasaponin E ₅	Acetonitrile/0.05%TFA-water=42.5/57.5	UV 205nm
44	Namino Tomimori, Masaaki Nakai, Yoshiko Ono, Yoshinori Kitagawa, Yoshinobu Kiso, Hiroshi Shibata	Identification of the Metabolites of Episesamin in Rat Bile and Human Liver Microsomes.	Biol. Pharm. Bull. 35(5) 709–716 (2012)	Metabolites of Episesamin (7 α ,7' β ,8 α ,8' α)-3,4-dihydroxy-3',4'-methylenedioxy-7,9':7',9'-diepoxylignane(EC-1-1)/ (7 α ,7' β ,8 α ,8' α)-3,4-methylenedioxy-3',4'-dihydroxy-7,9':7',9'-diepoxylignane (EC-1-2)	Methanol/0.1% Formic Acid-water =55/45	UV 280nm LC/MS
45	Hiroaki Aoshima, Toshio Miyase, and Tsutomu Warashina	Caffeic Acid Oligomers with Hyaluronidase Inhibitory Activity from <i>Clinopodium gracile</i>	Chem. Pharm. Bull. 60(4) 499–507 (2012)	Apigenin-7-O-rutinoside	Acetonitrile/0.05%TFA-water=17.5/82.5	UV 280nm
				Salvianolic Acid B	Acetonitrile/0.05%TFA-water=25/75	
				Clinopodic Acid E	Acetonitrile/0.05%TFA-water=30/70	
				(2R)-3-(3,4-Dihydroxy phenyl)-2-hydroxypropionic acid/(S)-PGME	Acetonitrile/0.05%TFA-water=15/85	
46	Young-Sil Lee, Byung-Yoon Cha, Kiyoto Saito, Sun-Sil Choi, Xiao Xing Wang, Bong-Keun Choi, Takayuki Yonezawa, Toshiaki Teruya, Kazuo Nagai, Je-Tae Woo	Effects of a <i>Citrus depressa</i> Hayata (shiikuwasa) extract on obesity in high-fat diet-induced obese mice	Phytomedicine 18 (2011) 648–654	Nobiletin/Tangeretin	Methanol/0.1%TFA-water=75/25	UV 215nm
47	Wakako Tsuzuki, Kaori Ushida	Preparative Separation of <i>cis</i> - and <i>trans</i> -Isomers of Unsaturated Fatty Acid Methyl Esters Contained in Edible Oils by Reversed-Phase High-Performance Liquid Chromatography	Lipids (2009) 44:373-379	Saturated or Unsaturated Fatty Acid Methyl Esters	Acetonitrile/Water=85/15	—
					Acetonitrile/Water=90/10	
					Acetonitrile	

■ 環境化学

No	著者	タイトル	論文	分析対象化合物	移動相	検出
48	Takatoshi Isobe, Hiroshi Okuhata, Hitoshi Miyasaka, Bong-Seok Jeon, and Ho-Dong Park	Detoxification of microcystin-LR in water by <i>Portulaca oleracea</i> cv.	Journal of Bioscience and Bioengineering VOL. 117 No. 3, 330–332, 2014	Microcystin-LR	Methanol/50mmol/l Potassium Dihydrogenphosphate (pH 3) = 58/42	UV 238nm
49	Takayuki KAMEDA, Yuki KATAYAMA, Tomoko GOTO, Akira TORIBA, Ning TANG, and Kazuichi HAYAKAWA	Improvement of the Analytical Method for Quinoid Polycyclic Aromatic Hydrocarbons Using HPLC with In-line Reduction and Fluorescence Detection: Application to Soluble Organic Fraction of Airborne Particles	BUNSEKI KAGAKU Vol. 62, No. 11, pp. 979-984 (2013)	PAHQs(7,12-BAQ/2,3-FIQ/1,6-PyQ/1,8-PyQ)	A:Water B:Methanol B conc. 50% (0-16min), 50 → 55% (16-35min), 55 → 60% (35-45min), 60 → 90% (45-75min), 90% (75-85min), 90-100% (85-90min), 100% (90-100min)	fluorescence detector

No	著者	タイトル	論文	分析対象化合物	移動相	検出
50	Ken Yasukawa, Sakiko Okuda, and Yasuhito Nobushi	Inhibitory Effects of <i>Gymnema (Gymnema sylvestre)</i> Leaves on Tumour Promotion in Two-Stage Mouse Skin Carcinogenesis	Evidence-Based Complementary and Alternative Medicine Volume 2014, Article ID 328684, 5 pages	* 分析対象化合物に関して論文をご参照ください	—	—
51	Makoto Hashimoto, Tsukasa Koen, Hiroaki Takahashi, Chihiro Suda, Katsuhiko Kitamoto and Isao Fujii	<i>Aspergillus oryzae</i> CsyB Catalyzes the Condensation of Two β -Ketoacyl-CoAs to form 3-Acetyl-4-hydroxy-6-alkyl- α -pyrone	THE JOURNAL OF BIOLOGICAL CHEMISTRY VOL. 289, NO. 29, pp. 19976–19984, July 18, 2014	CsyB	Methanol/0.1% Formic Acid-water, Gradient	UV 310nm
52	Hajime Kobori, Atsushi Sekiya, Tomohiro Suzuki, Jae-Hoon Choi, Hirofumi Hirai, and Hirokazu Kawagishi	Bioactive Sesquiterpene Aryl Esters from the Culture Broth of <i>Armillaria</i> sp.	<i>J. Nat. Prod.</i> 2015 78, 163-7	Melleolide Armillarinin/ Armillaridin/Armillarikin 13-Hydroxymelleolide K /5'-O-Methylmelledonal Melleolide D 13-Hydroxydihydromelleolide	Methanol/Water=60/40 Methanol/Water=70/30 Methanol/Water=60/40 Methanol/Water=60/40 Methanol/Water=60/40	—
53	Youngju Kim, Hiromu Ogura, Kazuaki Akasaka, Tsutomu Oikawa, Nobuyasu Matsuura, Chiaki Imada, Hisato Yasuda and Yasuhiro Igarashi	Nocapyrones: α - and γ -Pyrone from a Marine-Derived <i>Nocardiopsis</i> sp.	<i>Mar. Drugs</i> 2014, 12, 4110-4125	Nocapyrone R/ Nocapyrone L	Acetonitrile/Water=55/45	—
54	Arihiro Iwasaki, Shinpei Sumimoto, Osamu Ohno, Shoichiro Suda, and Kiyotake Suenaga	Kurahamide, a Cyclic Dipeptide Analog of Dolastatin 13 from a Marine Cyanobacterial Assemblage of <i>Lyngbya</i> sp.	<i>Bull. Chem. Soc. Jpn. Vol. 87, No. 5, 609-613 (2014)</i>	Kurahamide	Acetonitrile/Water=40/60	UV 215nm
55	Osamu Ohno, Ayane Watanabe, Maho Morita, and Kiyotake Suenaga	Biselyngbyolide B, a Novel ER Stress-inducer Isolated from the Marine Cyanobacterium <i>Lyngbya</i> sp.	<i>Chem. Lett.</i> 2014, 43, 287-289	Biselyngbyolide B/ Biselyngbyaside B	Methanol/Water	—
56	Suratno Lutl Ratnoglik, Chie Aoki, Pratiwi Sudarmono, Mari Komoto, Lin Deng, Ikuo Shoji, Hiroyuki Fuchino, Nobuo Kawahara and Hak Hotta	Antiviral activity of extracts from <i>Morinda citrifolia</i> leaves and chlorophyll catabolites, pheophorbide a and pyropheophorbide a, against hepatitis C virus	<i>Microbiol. Immunol</i> 2014; 58: 188–194	Antiviral activity of extracts	—	UV 400nm
57	Arihiro Iwasaki, Osamu Ohno, Shinpei Sumimoto, Shoichiro Suda and Kiyotake Suenaga	Kurahyne, an acetylene-containing lipopeptide from a marine cyanobacterial assemblage of <i>Lyngbya</i> sp.	<i>RSC Adv.</i> , 2014, 4, 12840	Kurahyne	Acetonitrile/Water	—
58	Takashi Iwai, Takaaki Kubota, Jane Fromont, and Jun'ichi Kobayashi	Nagelamide I and 2,2'-Dibromonagelamide B, New Dimeric Bromopyrrole-Imidazole Alkaloids from a Marine Sponge <i>Agelas</i> sp.	<i>Chem. Pharm. Bull.</i> 62(2) 213–216 (2014)	2,2'-Dibromo nagelamide B	Acetonitrile/0.1%TFA-water=25/75	UV 254nm
59	Sun-Sil Choi, Byung-Yoon Cha, Bong-Keun Choi, Young-Sil Lee, Takayuki Yonezawa, Toshiaki Teruya, Kazuo Nagai, Je-Tae Woo	Fargesin, a component of <i>Flos Magnoliae</i> , stimulates glucose uptake in L6 myotubes	<i>J Nat Med</i> (2013) 67:320-326	Kobusin/Epimagnolin	Acetonitrile/Water = 50/50	UV 215nm
60	Takaaki Kubota, Takahiro Iwai, Azusa Takahashi-Nakaguchi, Jane Fromont, Tohru Gono, Jun'ichi Kobayashi	Agelasines O–U, new diterpene alkaloids with a 9-N-methyladenine unit from a marine sponge <i>Agelas</i> sp.	<i>Tetrahedron</i> 68 (2012) 9738–9744	Agelasines Q/ Agelasines R	Methanol/0.1%TFA-water =75/25	UV 254nm
61	Jieyin Sun, Takayoshi Awakawa, Hiroshi Noguchi, Ikuro Abe	Induced production of mycotoxins in an endophytic fungus from the medicinal plant <i>Datura stramonium</i> L.	<i>Bioorganic & Medicinal Chemistry Letters</i> 22 (2012) 6397–6400	Alternariol/Alternariol-5-O-methyl ether/3'-hydroxyalternariol-5-O-methyl ether/Altenusin/Tenuazonic Acid/Altertoxin II	A:0.1%TFA-water B:0.1%TFA-acetonitrile	UV 280nm
62	Young-Sil Lee, Byung-Yoon Cha, Sun-Sil Choi, Yumiko Harada, Bong-Keun Choi, Takayuki Yonezawa, Toshiaki Teruya, Kazuo Nagai, Je-Tae Woo	Fargesin improves lipid and glucose metabolism in 3T3-L1 adipocytes and high-fat diet-induced obese mice	<i>Biofactors</i> 2012 38(4):300-8	Fargesin	Acetonitrile/Water=50/50	UV 215nm
63	Maho Morita, Osamu Ohno, Toshiaki Teruya, Takao Yamori, Toshiyasu Inuzuka, Kiyotake Suenaga	Isolation and structures of biselyngbyasides B, C, and D from the marine cyanobacterium <i>Lyngbya</i> sp., and the biological activities of biselyngbyasides	<i>Tetrahedron</i> 68 (2012) 5984–5990	Biselyngbyaside C	Acetonitrile/Water=65/35	UV 215nm

■ 天然物化学つづき

No	著者	タイトル	論文	分析対象化合物	移動相	検出
64	Tomohiro Suzuki, Jae-Hoon Choi, Takumi Kawaguchi, Kimiko Yamashita, Akio Morita, Hirofumi Hirai, Kaoru Nagai, Tomoyasu Hirose, Satoshi Omura, Toshiaki Sunazuka, Hirokazu Kawagishi	Makomotindoline from Makomotake, <i>Zizania latifolia</i> infected with <i>Ustilago esculenta</i>	Bioorganic & Medicinal Chemistry Letters 22 (2012) 4246–4248	Makomotindoline	Methanol/Water=10/90	—
65	Lianfu Zhang, Huanwei Zhang, Kessy H. Ndeurumi, Kirk L. Parkin, Muhamyankaka Venuste	Thermally-induced geometrical isomerisation of lycopene and its potential influence on functional activity	Food Chemistry 132 (2012) 2112–2117	E/Z-Lycopene	Acetonitrile/THF = 90/10	UV 472nm
66	Midori Asai, Ji-Won Lee, Yasunori Itakura, Bong-Keun Choi, Takayuki Yonezawa, Toshiaki Teruya, Byung-Yoon Cha, Motoko Ohnishi, Akira Yamaguchi, Je-Tae Woo	Effects of veraguensin and galgravin on osteoclast differentiation and function	Cytotechnology (2012) 64:315–322	Veraguensin/Galgravin	Acetonitrile/Water=50/50	—
67	Maho Morita, Osamu Ohno, and Kiyotake Suenaga	Biselyngbyolide A, a Novel Cytotoxic Macrolide from the Marine Cyanobacterium <i>Lyngbya</i> sp.	Chem. Lett. 2012, 41, 165-167	Biselyngbyolide A	Methanol/Water	—
68	Miki Kimura, Toshiyuki Wakimoto, Yoko Egami, Karen Co Tan, Yuji Ise, and Ikuro Abe	Calyxamides A and B, Cytotoxic Cyclic Peptides from the Marine Sponge <i>Discodermia calyx</i>	J. Nat. Prod. 2012, 75, 290-294	Calyxamide A/ Calyxamide B	Acetonitrile/0.05%TFA-water=33/67	UV 280nm
69	Yukiko Takenaka, Natsuko Morimoto, Nobuo Hamada, Takao Tanahashi	Phenolic compounds from the cultured mycobionts of <i>Graphis proserpens</i>	Phytochemistry 72 (2011) 1431–1435	<i>cis</i> -4,6-dihydroxymellein [No.8] mixture of (<i>R,S</i>)-and (<i>S,R</i>)-5,7-dihydroxy-3-(1-hydroxyethyl)phthalides [No.9] 5-Hydroxy-7-methoxy-3-(1-hydroxyethyl)phthalide [No.3]	Acetonitrile/Water=10/90	UV 250nm
70	Hnin Thanda Aung, Tadashi Furukawa, Toshiaki Nikai, Masatake Niwa, Yoshiaki Takaya	Contribution of cinnamic acid analogues in rosmarinic acid to inhibition of snake venom induced hemorrhage	Bioorganic & Medicinal Chemistry 19 (2011) 2392–2396	E/Z-Rosmarinic Acid	Acetonitrile/0.5%TFA-water= 20/80	UV 220nm
71	Asami HAYASHI, Masayoshi ARAI, Mayumi FUJITA, and Motomasa KOBAYASHI	Pyripyropenes, Fungal Sesquiterpenes Conjugated with α -Pyrone and Pyridine Moieties, Exhibits Anti-angiogenic Activity against Human Umbilical Vein Endothelial Cells	Biol. Pharm. Bull. 32(7) 1261–1265 (2009)	Pyripyropene A/ Pyripyropene B/ Pyripyropene D	Acetonitrile/Water	—

■ 有機化学

No	著者	タイトル	論文	分析対象化合物	移動相	検出
72	Zhigang Jian, Tapan Ray, Amy Wu, Lawrence Jones, and Ry Forseth	Proton exchange reactions in isotope chemistry (II) synthesis of stable isotope-labeled LCQ908	J. Label Compd. Radiopharm 2014, 57 670-673	<i>cis/trans</i> -[$^2\text{H}_4$, $^{13}\text{C}_2$]-Ethyl 4-[4-(5-[[6-(trifluoromethyl)pyridin-3-yl]amino]pyridin-2-yl)phenyl]cyclohexyl]acetate	Methanol/Water=80/20	UV 328nm
73	Yoshiya Fukumoto, Hiroto Shimizu, Aya Tashiro, and Naoto Chatani	Synthesis of α -Silylmethyl- α, β -Unsaturated Imines by the Rhodium-Catalyzed Silylimination of Primary-Alkyl-Substituted Terminal Alkynes	J. Org. Chem. 2014, 79, 8221-8227	E/Z-4-Methyl-2-dimethylphenylsilylmethylpropenal	—	—
74	Janjira Maneesan, Hideyuki Matsuura, Takayoshi Tagami, Haruhide Mori and Atsuo Kimura	Production of 1,5-anhydro-D-fructose by an α -glucosidase belonging to glycoside hydrolase family 31	Bioscience, Biotechnology, and Biochemistry, 2014 Vol. 78, No. 12, 2064-2068	O-ethyloxime-derivative of 1,5-Anhydro-D-fructose (AF-OH)	Acetonitrile/Water=0/100 → 55/45 Gradient	UV 207 nm
75	Shuhei Katsuta, Hiroyuki Saeki, Katsuki Tanaka, Yuki Murai, Daiki Kuzuhara, Masahiro Misaki, Naoki Aratani, Sadahiro Masuo, Yasukiyo Ueda and Hiroko Yamada	Synthesis and optical reactivity of 6,13- α -diketoprecursors of 2,3,9,10-tetraalkylpentacenes in solution, films and crystals	J. Mater. Chem. C, 2014, 2, 986	Tetraalkylpentacene derivative	Acetonitrile Acetonitrile/THF=80/20	—

■ 有機化学つづき

No	著者	タイトル	論文	分析対象化合物	移動相	検出
76	Toshie Fujishima, Takato Nozaki, Tsutomu Suenaga	Design and synthesis of novel 1,25-dihydroxyvitamin D ₃ analogues having a spiro-oxetane fused at the C2 position in the A-ring	Bioorganic & Medicinal Chemistry 21 (2013) 5209–5217	(5Z,7E)-(1R,3R)-2,2-(Methyleneoxy) methano-9,10-seco-5,7,10(19)-cholestatriene 1,3,25-triol/ (5Z,7E)-(1S,3S)-2,2-(Methyleneoxy) methano-9,10-seco-5,7,10(19)-cholestatriene 1,3,25-triol (5Z,7E)-(1R,3S)-2,2-(Methyleneoxy) methano-9,10-seco-5,7,10(19)-cholestatriene 1,3,25-triol/ (5Z,7E)-(1S,3R)-2,2-(Methyleneoxy) methano-9,10-seco-5,7,10(19)-cholestatriene 1,3,25-triol	Methanol/Water=75/25 Methanol/Water=75/25	—
77	Shunpei Hitosugi, Yuta Nakamura, Taisuke Matsuno, Waka Nakanishi, Hiroyuki Isobe	Iridium-catalyzed direct borylation of phenacenes	Tetrahedron Letters 53 (2012) 1180–1182	Diborylated chrysenes (2,8/2,9/3,9 positions)	—	—
78	Hidenori Nakayama, Takaaki Manaka, Mitsumasa Iwamoto and Shunsaku Kimura	Vertical orientation with a narrow distribution of helical peptides immobilized on a quartz substrate by stereocomplex formation	Soft Matter, 2012,8, 3387	DA16/LA16	—	—

■ 分析化学

No	著者	タイトル	論文	分析対象化合物	移動相	検出
79	Michał Szumski, Damian Grzywiński, Bogusław Buszewski	Cholesterol-based polymeric monolithic columns for capillary liquid chromatography	Journal of Chromatography A, 1373 (2014) 114–123	* 分析対象化合物に関して論文をご参照ください	—	—
80	Mike De Vrieze, Dieter Verzele, Roman Szucs, Pat Sandra, Frédéric Lynen	Evaluation of sphingomyelin, cholester, and phosphatidylcholine-based immobilized artificial membrane liquid chromatography to predict drug penetration across the blood-brain barrier	Anal Bioanal Chem (2014) 406:6179-6188	* 分析対象化合物に関して論文をご参照ください	Methanol/Dulbecco's Phosphate Buffered Saline (pH7.4 with Phosphoric Acid)=50/50	UV 210-300nm
81	Małgorzata Janicka and Anna Pachuta-Stec	Retention–property relationships of 1,2,4-triazoles by micellar and reversed-phase liquid chromatography	J. Sep. Sci. 2014, 37, 1419-1428	1,2,4-triazole derivatives	Acetonitrile/Buffer	UV 230nm
82	Jan Soukup, Szymon Bocian, Pavel Jandera and Bogusław Buszewski	Comparison of four cholesterol-based stationary phases for the separation of steroid hormones	J. Sep. Sci. 2014, 37, 345-351	Estrinol/Testosterone/ Estrone/ α -Estradiol/ β -Estradiol/progesterone	Methanol/Water=60/40	UV 220nm
83	Małgorzata Janicka, Małgorzata Sztanke, Krzysztof Sztanke	Reversed-phase liquid chromatography with octadecylsilyl, immobilized artificial membrane and cholesterol columns in correlation studies with in silico biological descriptors of newly synthesized antiproliferative and analgesic active compounds	Journal of Chromatography A, 1318 (2013) 92–101	* 分析対象化合物に関して論文をご参照ください	Acetonitrile/Buffer Step Gradient	UV 254nm
84	Małgorzata Janicka	Correlations between Chromatographic Parameters and Bioactivity Predictors of Potential Herbicides	Journal of Chromatographic Science 2014;52:676–684	* 分析対象化合物に関して論文をご参照ください	Acetonitrile/Buffer	—
85	Shauna A. Charlton, Jason W. Coym	The use of methyl- β -cyclodextrin to solubilize cholesterol prior to coating onto a C18 stationary phase	Journal of Chromatography A, 1266 (2012) 69–75	* 分析対象化合物に関して論文をご参照ください	—	—
86	E. Lesellier	Extension of the carotenoid test to superficially porous C18 bonded phases, aromatic ligand types and new classical C18 bonded phases	Journal of Chromatography A, 1266 (2012) 34–42	* 分析対象化合物に関して論文をご参照ください	—	—
87	Szymon Bocian, Jan Soukup, Maria Matyska, Joseph Pesek, Pavel Jandera, Bogusław Buszewski	The influence of the organic modifier in hydro-organic mobile phase on separation selectivity of steroid hormones separation using cholesterol-bonded stationary phases	Journal of Chromatography A, 1245 (2012) 90–97	* 分析対象化合物に関して論文をご参照ください	—	—
88	Caroline West, and Eric Lesellier	Chemometric methods to classify stationary phases for achiral packed column supercritical fluid chromatography	J. Chemometrics 2012; 26: 52-65	* 分析対象化合物に関して論文をご参照ください	—	—

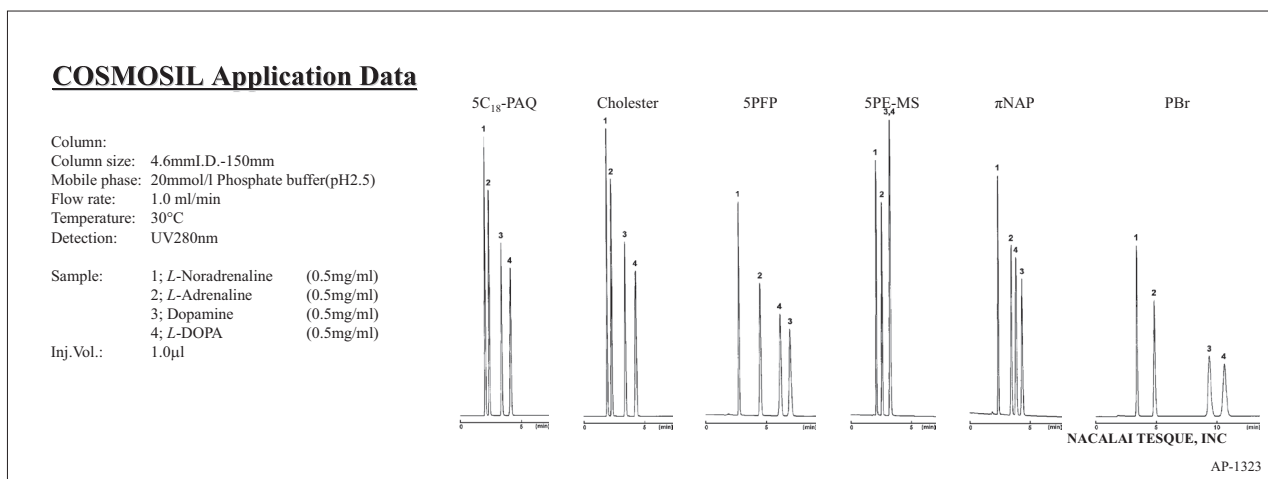
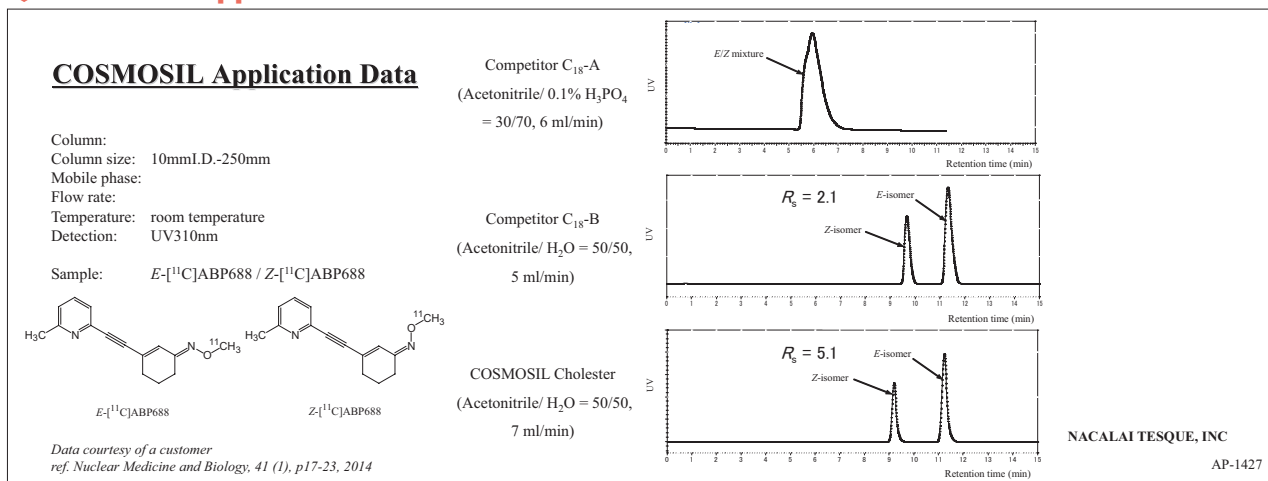
COSMOSIL Application Data

COSMOSIL Application Data

高速液体クロマトグラフィー (HPLC) の分析条件設定は、重要な工程の一つであり、経験や時間が必要となります。弊社 Web site の COSMOSIL Application (<http://www.nacalai.co.jp/cosmosil/data/csmosrctop.cfm>) では、汎用される C₁₈ カラムをはじめ各種カラムによる分析例を公開していますので、ご利用ください。

- 分析例：約 7,800 件(うち Cholester 87 件)
- 分析例が簡単検索可能
- 分析例は印刷可能
- 分析例で使用のカラム、試薬の注文が便利

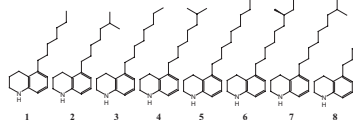
Cholester Application Data



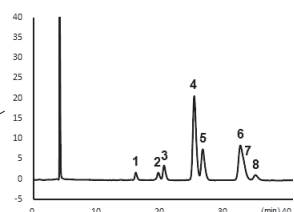
COSMOSIL Application Data

Column: COSMOSIL **
 Column size: 4.6mm I.D.-250mm
 Mobile phase: Methanol/ H₂O = */*
 Flow rate: 0.8 ml/min
 Temperature: 25°C
 Detection: UV254nm

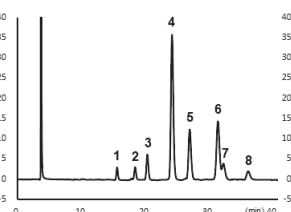
Sample: 5-alkyl-1,2,3,4-tetrahydroquinolines
 (5aTHQs)



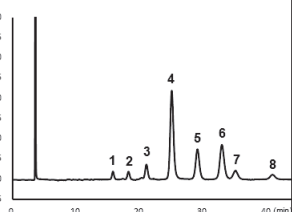
5C₈-MS
 (Methanol/ H₂O = 82.5/17.5)



5C₁₈-AR-II
 (Methanol/ H₂O = 89/11)



Cholester
 (Methanol/ H₂O = 90/10)



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AP-1482

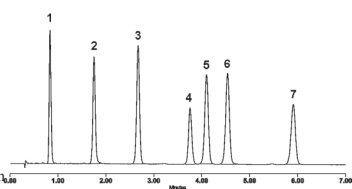
COSMOSIL Application Data

Column: 2.5Cholester
 Column size: 2.0mm I.D.-50mm
 Mobile phase: A; 0.05% TFA-H₂O
 B; 0.05% TFA-Acetonitrile
 B conc. 20→30% 7min Linear gradient
 Flow rate: 0.4 ml/min
 Temperature: 30°C
 Detection: UV370nm

Sample:
 1; Topotecan
 2; 9-Aminocamptothecin
 3; 10-Hydroxycamptothecin
 4; Irinotecan
 5; Camptothecin
 6; 7-Ethyl 10-Hydroxycamptothecin
 7; 9-Nitro-20(S)-Camptothecin

Inj.Vol.: 0.5µl

Data courtesy of a LKT Laboratories, Inc



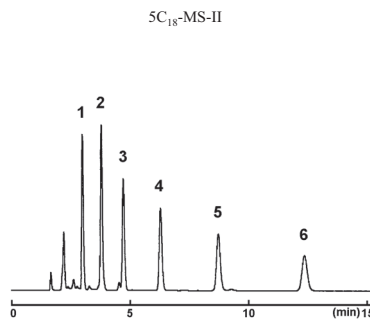
NACALAI TESQUE, INC

AP-1295

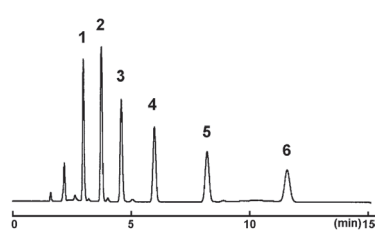
COSMOSIL Application Data

Column: 5C₁₈-MS-II
 Column size: 4.6mm I.D.-150mm
 Mobile phase: Methanol/H₂O = 80/20
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV254nm

Sample:
 1; Benzene (1.67µg)
 2; Toluene (1.67µg)
 3; Ethylbenzene (1.67µg)
 4; n-Propylbenzene (1.67µg)
 5; n-Butylbenzene (1.67µg)
 6; Amylbenzene (1.67µg)



Cholester



NACALAI TESQUE, INC

AP-1018

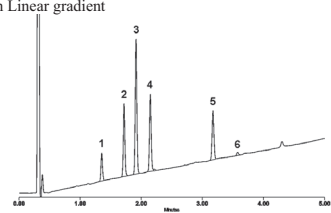
COSMOSIL Application Data

Column: 2.5Cholester
 Column size: 2.0mm I.D.-50mm
 Mobile phase: A; 0.1% Formic Acid-H₂O
 B; 0.1% Formic Acid-Acetonitrile
 B conc. 25→85% 5min Linear gradient
 Flow rate: 0.4 ml/min
 Temperature: 30°C
 Detection: UV230nm

Sample:
 1; Coumarin
 2; Luteolin
 3; Psoralen
 4; Apigenin
 5; Sedanolide
 6; trans-Anethole

Inj.Vol.: 0.5µl

Data courtesy of a LKT Laboratories, Inc



NACALAI TESQUE, INC

AP-1296

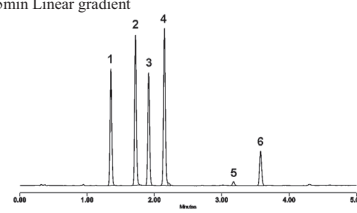
COSMOSIL Application Data

Column: 2.5Cholester
 Column size: 2.0mm I.D.-50mm
 Mobile phase: A; 0.1% Formic Acid-H₂O
 B; 0.1% Formic Acid-Acetonitrile
 B conc. 25→85% 5min Linear gradient
 Flow rate: 0.4 ml/min
 Temperature: 30°C
 Detection: UV260nm

Sample:
 1; Coumarin
 2; Luteolin
 3; Psoralen
 4; Apigenin
 5; Sedanolide
 6; trans-Anethole

Inj.Vol.: 0.5µl

Data courtesy of a LKT Laboratories, Inc



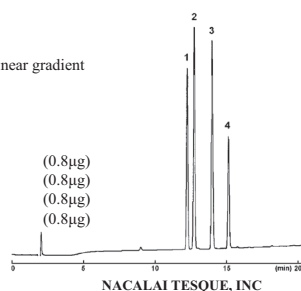
NACALAI TESQUE, INC

AP-1297

COSMOSIL Application Data

Column: Cholestel
Column size: 4.6mm I.D.-150mm
Mobile phase: A: 0.05%TFA-H₂O
B: 0.05%TFA-Acetonitrile
B conc. 10→40% 20min Linear gradient
Flow rate: 1.0 ml/min
Temperature: 30°C
Detection: UV220nm

Sample: 1: Oxytocin (0.8µg)
2: Angiotensin II(Human) (0.8µg)
3: Angiotensin I(Human) (0.8µg)
4: Substance P (0.8µg)



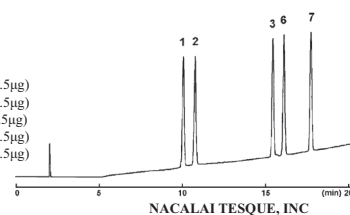
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AP-0238

COSMOSIL Application Data

Column: Cholestel
Column size: 4.6mm I.D.-150mm
Mobile phase: A: 0.05%TFA-10%Acetonitrile
B: 0.05%TFA-30%Acetonitrile
B conc. 0→100% 20min Linear gradient
Flow rate: 1.0 ml/min
Temperature: 30°C
Detection: UV220nm

Sample: 1: Angiotensin II, [Sar¹,Thr⁸] (0.5µg)
2: Angiotensin II, [Sar¹,Ala⁸] (0.5µg)
3: Angiotensin II, Des-Asp¹-[Ile⁸] (0.5µg)
6: Angiotensin II, [Val¹] (0.5µg)
7: Angiotensin II (Human) (0.5µg)



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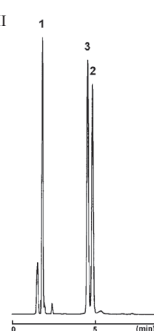
AP-0242

COSMOSIL Application Data

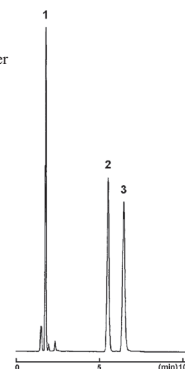
Column: 5C₁₈-MS-II
Column size: 4.6mm I.D.-150mm
Mobile phase: Acetonitrile/ 20mmol/l Phosphate buffer(pH2.5) = 40/60
Flow rate: 1.0 ml/min
Temperature: 30°C
Detection: UV280nm

Sample: 1: Naringin (0.4µg)
2: Naringenin (0.2µg)
3: Apigenin (0.2µg)

5C₁₈-MS-II



Cholestel



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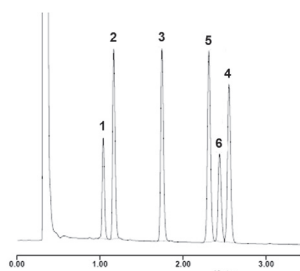
AP-1033

COSMOSIL Application Data

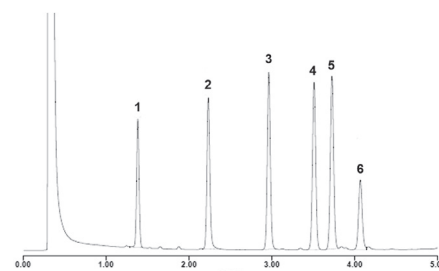
Column: Competitor 1.7µm C₁₈
Column size: (2.1mm I.D.-50mm)
Mobile phase: A: 10mmol/l Phosphate buffer(pH2.6)
B: Acetonitrile
B conc. 20→50% 5min Linear gradient
Flow rate: 0.4 ml/min
Temperature: 30°C
Detection: UV210nm

Sample: 1: Hesperidin [Vitamin P]
2: Myricetin
3: Luteolin
4: Hesperetin
5: Apigenin
6: Kaempferol
Inj.Vol.: 0.5µl

Competitor 1.7µm C₁₈
(2.1mm I.D.-50mm)



2.5Cholestel
(2.0mm I.D.-50mm)



NACALAI TESQUE, INC

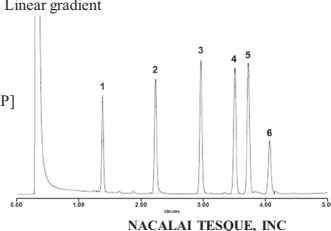
AP-1292

Data courtesy of a LKT Laboratories, Inc

COSMOSIL Application Data

Column: 2.5Cholestel
Column size: 2.0mm I.D.-50mm
Mobile phase: A: 10mmol/l Phosphate buffer(pH2.6)
B: Acetonitrile
B conc. 20→50% 5min Linear gradient
Flow rate: 0.4 ml/min
Temperature: 30°C
Detection: UV210nm

Sample: 1: Hesperidin [Vitamin P]
2: Myricetin
3: Luteolin
4: Hesperetin
5: Apigenin
6: Kaempferol
Inj.Vol.: 0.5µl



NACALAI TESQUE, INC

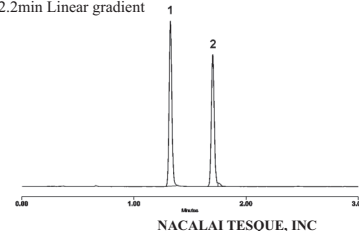
AP-1292P

Data courtesy of a LKT Laboratories, Inc

COSMOSIL Application Data

Column: 2.5Cholestel
Column size: 2.0mm I.D.-50mm
Mobile phase: A: 0.1% Formic Acid-H₂O
B: 0.1% Formic Acid-Acetonitrile
B conc. 30→60% 2.2min Linear gradient
Flow rate: 0.4 ml/min
Temperature: 30°C
Detection: UV340nm

Sample: 1: Luteolin
2: Apigenin
Inj.Vol.: 0.5µl



NACALAI TESQUE, INC

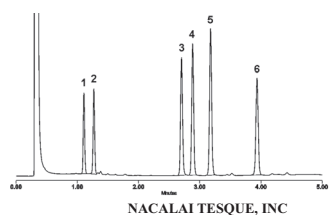
AP-1298

Data courtesy of a LKT Laboratories, Inc

COSMOSIL Application Data

Column: 2.5Cholester
 Column size: 2.0mmI.D.-50mm
 Mobile phase: A; 10mmol/l Phosphate buffer(pH2.6)
 B; Acetonitrile
 B conc. 20→50% 5min Linear gradient
 Flow rate: 0.4 ml/min
 Temperature: 30°C
 Detection: UV210nm

Sample: 1; Rutin
 2; Naringin
 3; Quercetin
 4; Naringenin
 5; Apigenin
 6; Nobiletin
 Inj.Vol.: 0.5µl



NACALAI TESQUE, INC

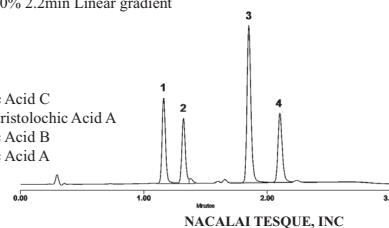
Data courtesy of a LKT Laboratories, Inc

AP-1299

COSMOSIL Application Data

Column: 2.5Cholester
 Column size: 2.0mmI.D.-50mm
 Mobile phase: A; 0.1% Formic Acid-H₂O
 B; 0.1% Formic Acid-Acetonitrile
 B conc. 40→70% 2.2min Linear gradient
 Flow rate: 0.4 ml/min
 Temperature: 30°C
 Detection: UV250nm

Sample: 1; Aristolochic Acid C
 2; 7-Hydroxyaristolochic Acid A
 3; Aristolochic Acid B
 4; Aristolochic Acid A
 Inj.Vol.: 0.5µl



NACALAI TESQUE, INC

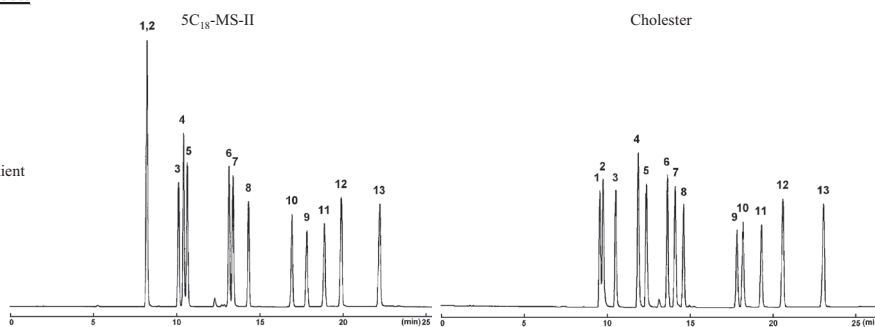
Data courtesy of a LKT Laboratories, Inc

AP-1291

COSMOSIL Application Data

Column: 5C₁₈-MS-II
 Column size: 4.6mmI.D.-150mm
 Mobile phase: A: Acetonitrile/ 20mmol/l Phosphate
 buffer(pH2.5) = 20/80
 B: Acetonitrile/ 20mmol/l Phosphate
 buffer(pH2.5) = 70/30
 B conc. 0→100% 20min Linear gradient
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV280nm

Sample: 1; Fisetin (0.25µg)
 2; Myricetin (0.20µg)
 3; 7,8-Dihydroxyflavone (0.05µg)
 4; Luteolin (0.20µg)
 5; Quercetin (0.20µg)
 6; 7-Hydroxyflavone (0.10µg)
 7; Baicalin (0.05µg)
 8; 6-Hydroxyflavone (0.05µg)
 9; Flavone (0.05µg)
 10; Chrysin (0.05µg)
 11; 6-Methoxyflavone (0.05µg)
 12; 3-Hydroxyflavone (0.25µg)
 13; 5-Hydroxyflavone (0.05µg)



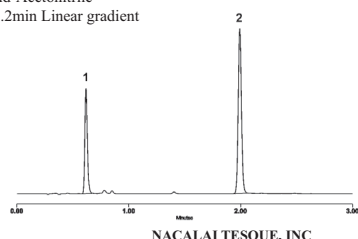
NACALAI TESQUE, INC

AP-1032

COSMOSIL Application Data

Column: 2.5Cholester
 Column size: 2.0mmI.D.-50mm
 Mobile phase: A; 0.1% Formic Acid-H₂O
 B; 0.1% Formic Acid-Acetonitrile
 B conc. 35→65% 2.2min Linear gradient
 Flow rate: 0.4 ml/min
 Temperature: 30°C
 Detection: UV275nm

Sample: 1; Baicalin
 2; Wogonin
 Inj.Vol.: 0.5µl



NACALAI TESQUE, INC

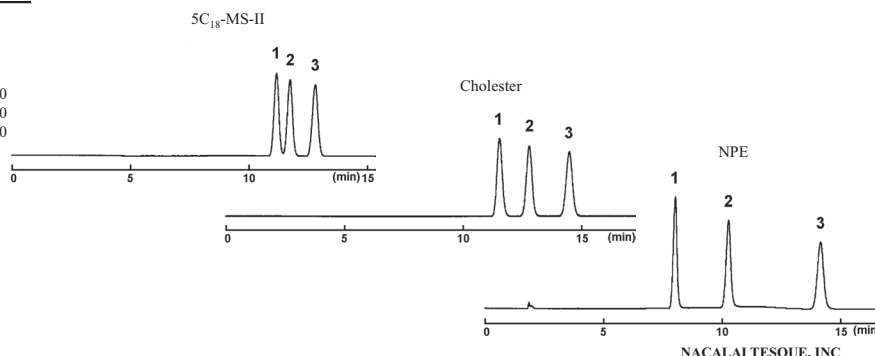
Data courtesy of a LKT Laboratories, Inc

AP-1305

COSMOSIL Application Data

Column: 5C₁₈-MS-II
 Column size: 4.6mmI.D.-150mm
 Mobile phase: 5C₁₈-MS-II Methanol/ H₂O = 50/50
 Cholester Methanol/ H₂O = 50/50
 NPE Methanol/ H₂O = 40/60
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV254nm

Sample: 1; Benzene (3.0µg)
 2; Fluorobenzene (1.0µg)
 3; o-Difluorobenzene (1.0µg)



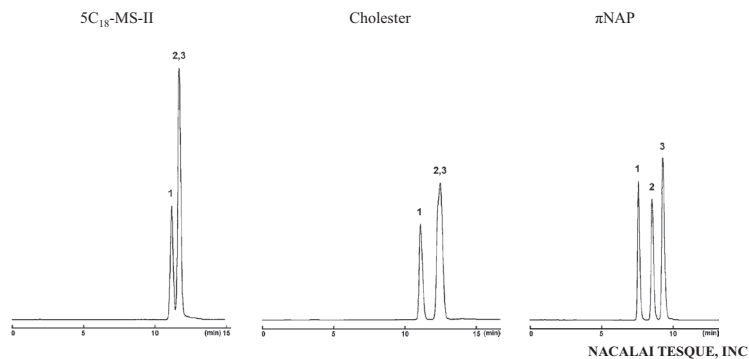
NACALAI TESQUE, INC

AP-1047

COSMOSIL Application Data

Column: 4.6mm I.D.-150mm
 Mobile phase: Methanol/ H₂O = 50/50
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV254nm

Sample: 1; Benzene (6.0µg)
 2; Fluorobenzene (2.0µg)
 3; *p*-Difluorobenzene (2.0µg)

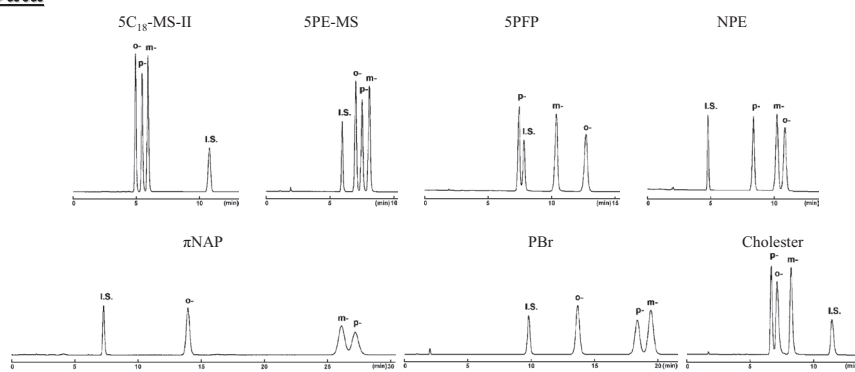
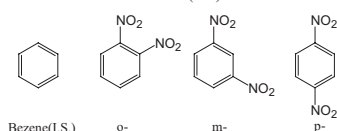


AP-1053

COSMOSIL Application Data

Column: 4.6mm I.D.-150mm
 Mobile phase: Methanol/ H₂O = 50/50
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV254nm

Sample: *o*-Dinitrobenzene
m-Dinitrobenzene
p-Dinitrobenzene
 Benzene (I.S.)

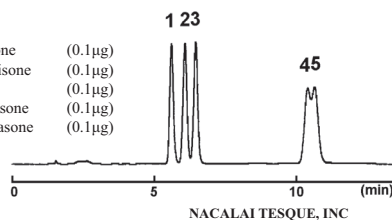


AP-1311

COSMOSIL Application Data

Column: Cholester
 Column size: 4.6mm I.D.-150mm
 Mobile phase: Acetonitrile/ H₂O = 30/70
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV240nm

Sample: 1; Prednisolone (0.1µg)
 2; Hydrocortisone (0.1µg)
 3; Cortisone (0.1µg)
 4; Betamethasone (0.1µg)
 5; Dexamethasone (0.1µg)

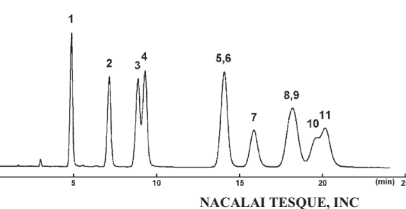


AP-0234

COSMOSIL Application Data

Column: Cholester
 Column size: 4.6mm I.D.-150mm
 Mobile phase: Methanol/ H₂O = 50/50
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV254nm

Sample: 1; Triamcinolone
 2; Cortisone
 3; Prednisolone
 4; Hydrocortisone
 5; Betamethasone
 6; Dexamethasone
 7; Triamcinolone Acetonide
 8; Cortisone-21-Acetate
 9; Prednisolone 21-Acetate
 10; Fluocinolone Acetonide
 11; Fluorometholone (each 0.23µg)

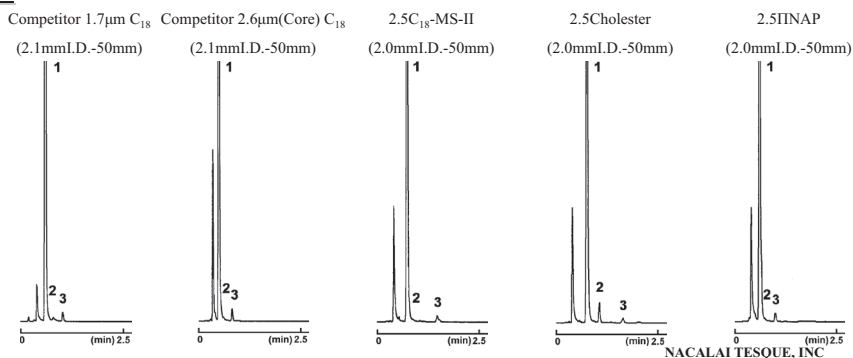


AP-0271

COSMOSIL Application Data

Column: 2.1mm I.D.-50mm
 Column size: 2.1mm I.D.-50mm
 Mobile phase: Methanol/ H₂O = 90/10
 Flow rate: 0.4 ml/min
 Temperature: 40°C
 Detection: UV254nm

Sample: 1; Bibenzyl (1.0mg/ml)
 2; Anthracene
 3; Unknow
 Inj. Vol: 1.0µl

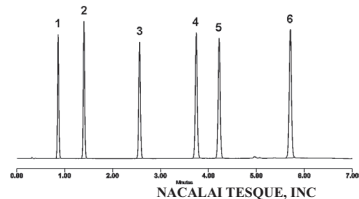


AP-1260

COSMOSIL Application Data

Column: 2.5Cholester
 Column size: 2.0mm I.D.-50mm
 Mobile phase: A; 0.1% Formic Acid-H₂O
 B; 0.1% Formic Acid-Acetonitrile
 B conc. 20→55% 6min Linear gradient
 Flow rate: 0.4 ml/min
 Temperature: 30°C
 Detection: UV255nm

Sample: 1; Daidzin
 2; Genistin
 3; Daidzein
 4; Genistein
 5; Formononetin
 6; Biochanin A
 Inj. Vol.: 0.5µl



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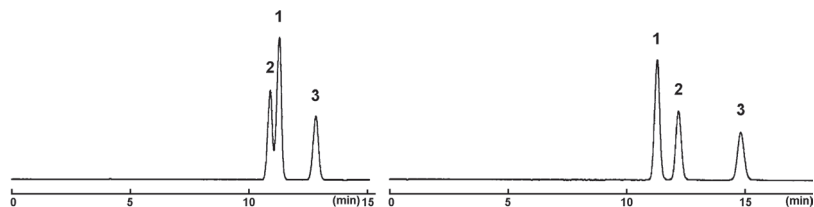
Data courtesy of a LKT Laboratories, Inc

AP-1304

COSMOSIL Application Data

Column: 5C₁₈-MS-II
 Column size: 4.6mm I.D.-150mm
 Mobile phase: Methanol/ H₂O = 60/40
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV254nm

Sample: 1; Toluene (3.3µg)
 2; Chlorobenzene (3.3µg)
 3; Bromobenzene (3.3µg)



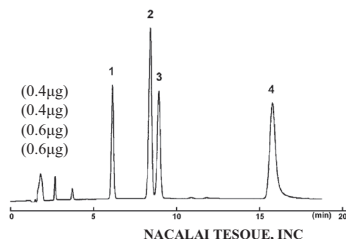
NACALAI TESQUE, INC

AP-1046

COSMOSIL Application Data

Column: Cholester
 Column size: 4.6mm I.D.-150mm
 Mobile phase: Acetonitrile / 0.1% Phosphoric Acid = 45/55
 Flow rate: 1.0 ml/min
 Temperature: 40°C
 Detection: UV300nm

Sample: 1; Bufalin (0.4µg)
 2; Cinobufagin (0.4µg)
 3; Resibufogenin (0.6µg)
 4; Indometacin [Indomethacin] (0.6µg)



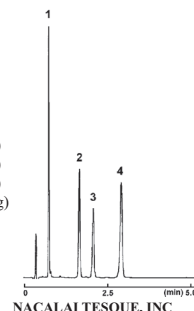
NACALAI TESQUE, INC

AP-0204

COSMOSIL Application Data

Column: 2.5Cholester
 Column size: 3.0mm I.D.-75mm
 Mobile phase: Acetonitrile/ H₂O = 40/60
 Flow rate: 1.0 ml/min
 Temperature: 40°C
 Detection: UV254nm

Sample: 1; Prednisolone (0.1µg)
 2; Prednisolone 2/-Acetate (0.1µg)
 3; Cortisone-2/-Acetate (0.1µg)
 4; Butyl p-Hydroxybenzoate (0.05µg)



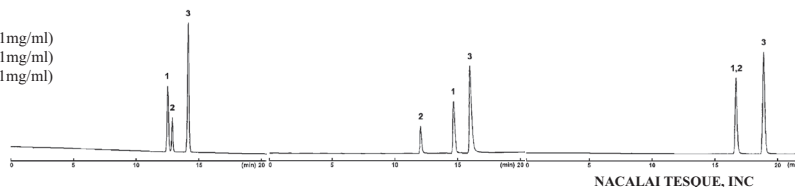
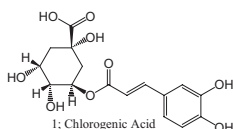
NACALAI TESQUE, INC

AP-1144

COSMOSIL Application Data

Column: 5C₁₈-MS-II
 Column size: 4.6mm I.D.-150mm
 Mobile phase: A: 20mmol/l Phosphate buffer(pH2.5)
 B: Methanol
 B conc. 10→50% 20min Linear gradient
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV290nm

Sample: 1; Chlorogenic Acid (0.1mg/ml)
 2; Caffeine (0.1mg/ml)
 3; Caffeic Acid [3,4-Dihydroxycinnamic Acid] (0.1mg/ml)
 Inj. Vol.: 1.0µl



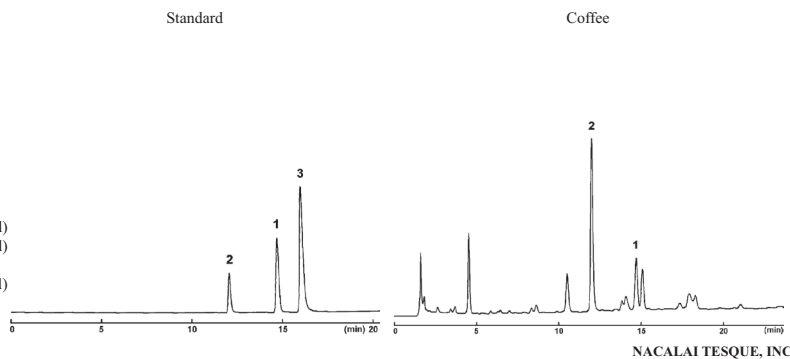
NACALAI TESQUE, INC

AP-1266

COSMOSIL Application Data

Column: Cholester
 Column size: 4.6mm I.D.-150mm
 Mobile phase: A: 20mmol/l Phosphate buffer(pH2.5)
 B: Methanol
 B conc. 10→50% 20min Linear gradient
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV290nm

Sample: 1; Chlorogenic Acid (0.1mg/ml)
 2; Caffeine (0.1mg/ml)
 3; Caffeic Acid (0.1mg/ml)
 [3,4-Dihydroxycinnamic Acid] (0.1mg/ml)
 Inj. Vol: 1.0μl

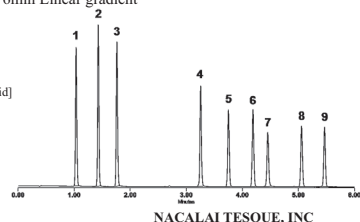


AP-1267

COSMOSIL Application Data

Column: 2.5Cholester
 Column size: 2.0mm I.D.-50mm
 Mobile phase: A: 0.1% Formic Acid-H₂O
 B: 0.1% Formic Acid-Acetonitrile
 B conc. 15→100% 6min Linear gradient
 Flow rate: 0.4 ml/min
 Temperature: 30°C
 Detection: UV325nm

Sample: 1; Caffeic Acid [3,4-Dihydroxycinnamic Acid]
 2; Ferulic Acid
 3; Methyl Caffeate
 4; Phenethyl Caffeate
 5; Phenylethyl 3-Methylcaffeate
 6; Phenylethyl 3,4-Dimethylcaffeate
 7; *n*-Octyl Caffeate
 8; *n*-Octyl 3-Methylcaffeate
 9; *n*-Octyl 3,4-Dimethylcaffeate
 Inj. Vol.: 0.5μl

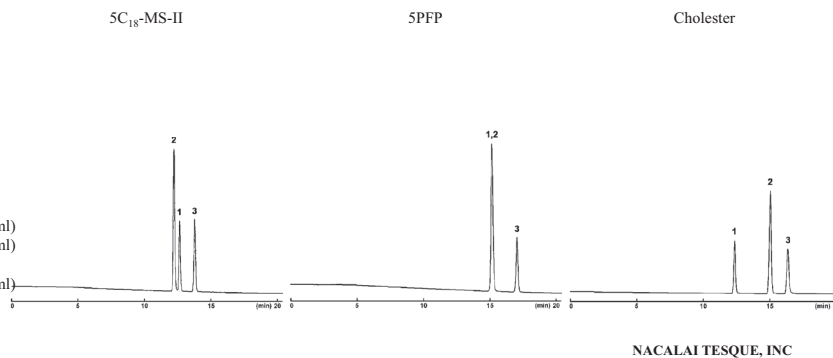


AP-1294

COSMOSIL Application Data

Column: 5C₁₈-MS-II
 Column size: 4.6mm I.D.-150mm
 Mobile phase: A: 20mmol/l Phosphate buffer(pH2.5)
 B: Methanol
 B conc. 10→50% 20min Linear gradient
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV290nm

Sample: 1; Caffeine (0.20mg/ml)
 2; Chlorogenic Acid (0.20mg/ml)
 3; Caffeic Acid (0.20mg/ml)
 [3,4-Dihydroxycinnamic Acid] (0.05mg/ml)
 Inj. Vol: 1.0μl

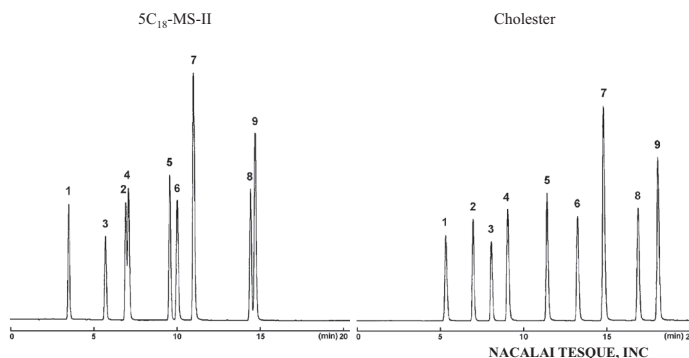


AP-1310

COSMOSIL Application Data

Column: 5C₁₈-MS-II
 Column size: 4.6mm I.D.-150mm
 Mobile phase: A: Acetonitrile/ 20mmol/l Phosphate buffer(pH2.5) = 10/90
 B: Acetonitrile/ 20mmol/l Phosphate buffer(pH2.5) = 30/70
 B conc. 0→100% 20min Linear gradient
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV280nm

Sample: 1; (-) - Galocatechin [(-) - GC] (0.80mg/ml)
 2; Caffeine (0.08mg/ml)
 3; (-) - Epigallocatechin [(-) - EGC] (0.80mg/ml)
 4; (-) - Catechin [(-) - C] (0.40mg/ml)
 5; (-) - Epicatechin [(-) - EC] (0.40mg/ml)
 6; (-) - Epigallocatechin Gallate [(-) - EGCg] (0.20mg/ml)
 7; (-) - Galocatechin Gallate [(-) - GCg] (0.40mg/ml)
 8; (-) - Epicatechin Gallate [(-) - ECg] (0.20mg/ml)
 9; (-) - Catechin Gallate [(-) - Cg] (0.20mg/ml)
 Injection Vol. 1.0μl



AP-1072

COSMOSIL Application Data

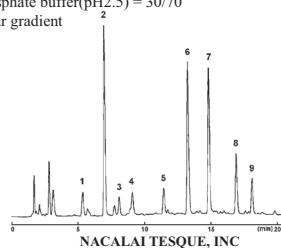
Column: Cholester
 Column size: 4.6mm I.D.-150mm
 Mobile phase: A: Acetonitrile/ 20mmol/l Phosphate buffer(pH2.5) = 10/90
 B: Acetonitrile/ 20mmol/l Phosphate buffer(pH2.5) = 30/70
 B conc. 0→100% 20min Linear gradient

Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV280nm

Sample:

1: (-) - Gallocatechin [(-) - GC]
 2: Caffeine
 3: (-) - Epigallocatechin [(-) - EGC]
 4: (-) - Catechin [(-) - C]
 5: (-) - Epicatechin [(-) - EC]
 6: (-) - Epigallocatechin Gallate [(-) - EGCg]
 7: (-) - Gallocatechin Gallate [(-) - GCg]
 8: (-) - Epicatechin Gallate [(-) - ECg]
 9: (-) - Catechin Gallate [(-) - Cg]

Injection Vol. 1.0μl



AP-1077

COSMOSIL Application Data

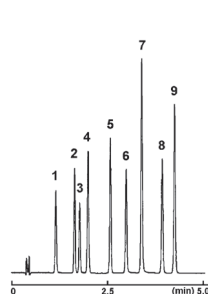
Column size: 3.0mm I.D.-75mm
 Mobile phase: A: Acetonitrile/ 20mmol/l Phosphate buffer(pH2.5) = 10/90
 B: Acetonitrile/ 20mmol/l Phosphate buffer(pH2.5) = 30/70
 B conc. 0→100% 5min Linear gradient

Mixer 0.5ml
 Flow rate: 1.0 ml/min
 Temperature: 40°C
 Detection: UV280nm

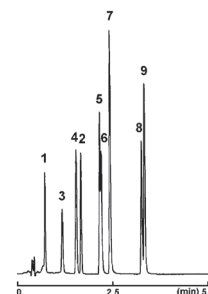
Sample: 1: (-) - Gallocatechin [(-) - GC] (0.40mg/ml)
 2: Caffeine (0.04mg/ml)
 3: (-) - Epigallocatechin [(-) - EGC] (0.40mg/ml)
 4: (-) - Catechin [(-) - C] (0.20mg/ml)
 5: (-) - Epicatechin [(-) - EC] (0.20mg/ml)
 6: (-) - Epigallocatechin Gallate [(-) - EGCg] (0.10mg/ml)
 7: (-) - Gallocatechin Gallate [(-) - GCg] (0.20mg/ml)
 8: (-) - Epicatechin Gallate [(-) - ECg] (0.10mg/ml)
 9: (-) - Catechin Gallate [(-) - Cg] (0.10mg/ml)

Injection Vol. 1.0μl

COSMOSIL 2.5Cholester



Competitor 2μmC₁₈



NACALAI TESQUE, INC

AP-1138

COSMOSIL Application Data

Column: COSMOSIL Cholester
 Mobile phase: A: Acetonitrile/ 20mmol/l Phosphate buffer(pH2.5) = 10/90
 B: Acetonitrile/ 20mmol/l Phosphate buffer(pH2.5) = 30/70
 B conc. 0→100% Linear gradient(5μm: 20min, 2.5μm: 5min)

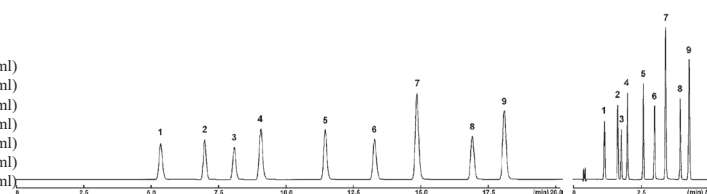
Mixer 5μm: 2.6ml, 2.5μm: 0.5ml
 Flow rate: 1.0 ml/min
 Temperature: 40°C
 Detection: UV280nm

Sample: 1: (-) - Gallocatechin [(-) - GC] (0.40mg/ml)
 2: Caffeine (0.04mg/ml)
 3: (-) - Epigallocatechin [(-) - EGC] (0.40mg/ml)
 4: (-) - Catechin [(-) - C] (0.20mg/ml)
 5: (-) - Epicatechin [(-) - EC] (0.20mg/ml)
 6: (-) - Epigallocatechin Gallate [(-) - EGCg] (0.10mg/ml)
 7: (-) - Gallocatechin Gallate [(-) - GCg] (0.20mg/ml)
 8: (-) - Epicatechin Gallate [(-) - ECg] (0.10mg/ml)
 9: (-) - Catechin Gallate [(-) - Cg] (0.10mg/ml)

Injection Vol. 1.0μl

Cholester (5μm)
 (4.6mm I.D.-150mm)

2.5Cholester (2.5μm)
 (3.0mm I.D.-75mm)



NACALAI TESQUE, INC

AP-1140

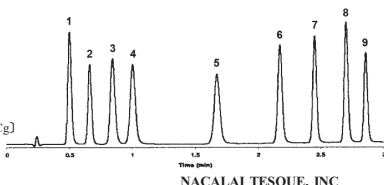
COSMOCORE Application Data

Column: COSMOCORE 2.6Cholester
 Column size: 2.1mm I.D.-50mm
 Mobile phase: A: Acetonitrile/ 0.1% H₃PO₄ = 10/90
 B: Acetonitrile/ 0.1% H₃PO₄ = 40/60
 B conc. 0→100% 3min Linear gradient

Flow rate: 0.6 ml/min
 Temperature: 30°C
 Detection: UV280nm

Sample:

1: (-) - Gallocatechin [(-) - GC]
 2: Caffeine
 3: (-) - Epigallocatechin [(-) - EGC]
 4: (-) - Catechin [(-) - C]
 5: (-) - Epicatechin [(-) - EC]
 6: (-) - Epigallocatechin Gallate [(-) - EGCg]
 7: (-) - Gallocatechin Gallate [(-) - GCg]
 8: (-) - Epicatechin Gallate [(-) - ECg]
 9: (-) - Catechin Gallate [(-) - Cg]



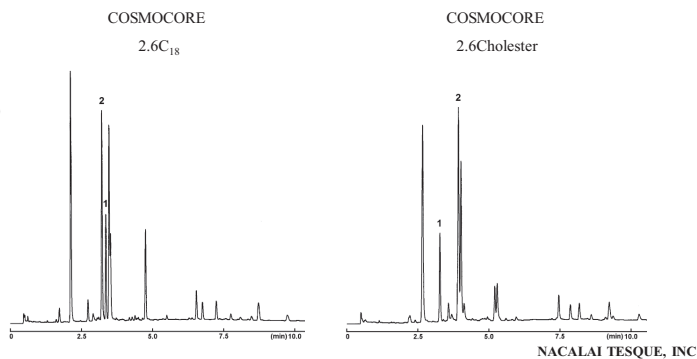
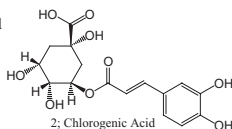
NACALAI TESQUE, INC

Data courtesy of a customer

AP-1403

COSMOCORE Application Data

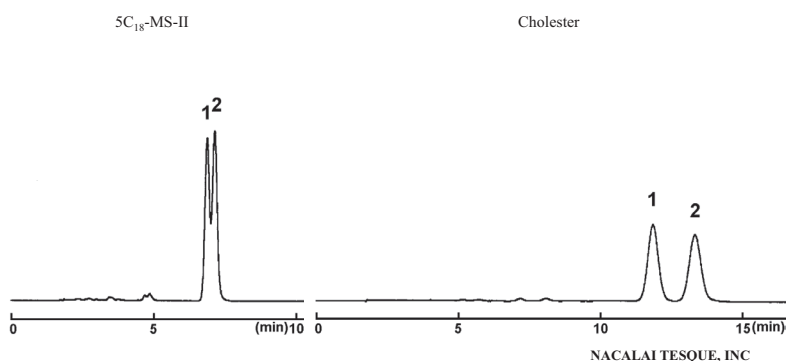
Column: COSMOCORE 2.6C₁₈
 Column size: 2.1mm I.D.-100mm
 Mobile phase: A: Acetonitrile/ 20mmol/l Phosphate buffer(pH2.5) = 5/95
 B: Acetonitrile/ 20mmol/l Phosphate buffer(pH2.5) = 50/50
 B conc. 0→60% 10min Linear gradient
 Mixer: 0.18ml
 Flow rate: 0.4 ml/min
 Temperature: 40°C
 Detection: UV290nm
 Sample: Coffee
 1; Caffeine
 2; Chlorogenic Acid
 Inj. Vol: 0.5µl



AP-1409

COSMOSIL Application Data

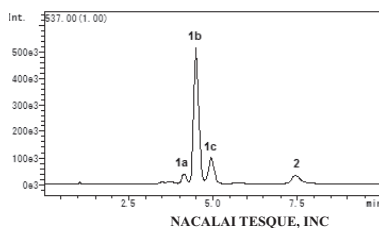
Column: COSMOSIL 5C₁₈-MS-II
 Column size: 4.6mm I.D.-150mm
 Mobile phase: Tetrahydrofuran/Methanol = 20/80
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV470nm
 Sample: 1; α-Carotene
 2; β-Carotene



AP-1031

COSMOCORE Application Data

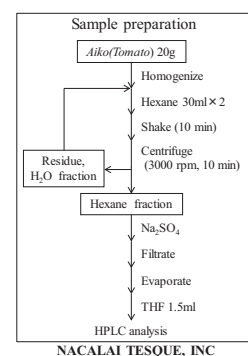
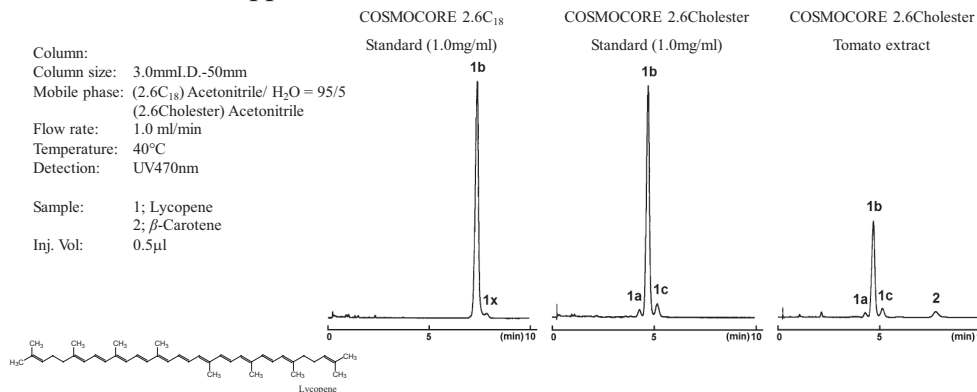
Column: COSMOCORE 2.6Cholester
 Column size: 3.0mm I.D.-50mm
 Mobile phase: Acetonitrile
 Flow rate: 1.0 ml/min
 Temperature: 40°C
 Detection: APCI-MS, Positive, SIM
 Sample: Tomato extract
 1; Lycopene
 2; β-Carotene
 Inj. Vol: 0.5µl



AP-1402

COSMOCORE Application Data

Column: COSMOCORE 2.6C₁₈
 Column size: 3.0mm I.D.-50mm
 Mobile phase: (2.6C₁₈) Acetonitrile/ H₂O = 95/5
 (2.6Cholester) Acetonitrile
 Flow rate: 1.0 ml/min
 Temperature: 40°C
 Detection: UV470nm
 Sample: 1; Lycopene
 2; β-Carotene
 Inj. Vol: 0.5µl



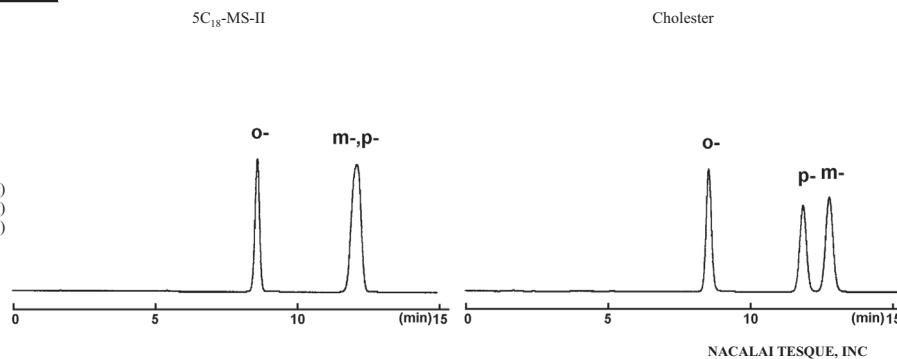
NACALAI TESQUE, INC

AP-1410

COSMOSIL Application Data

Column: 5C₁₈-MS-II
 Column size: 4.6mm I.D. -150mm
 Mobile phase: Methanol/ H₂O = 50/50
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV254nm

Sample: *o*-Chloroacetophenone (0.30µg)
m-Chloroacetophenone (0.15µg)
p-Chloroacetophenone (0.05µg)

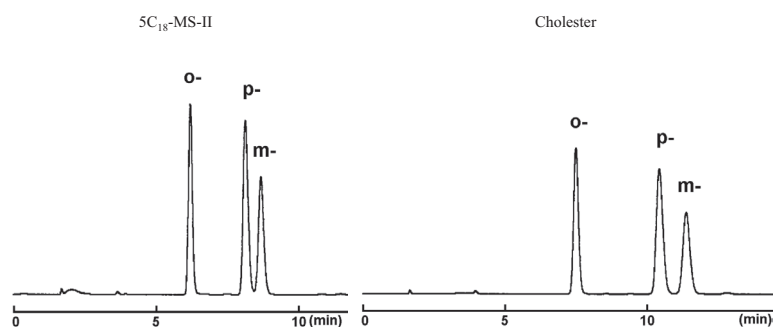


AP-1044

COSMOSIL Application Data

Column: 5C₁₈-MS-II
 Column size: 4.6mm I.D. -150mm
 Mobile phase: Methanol/ H₂O = 50/50
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV254nm

Sample: *o*-Chlorophenol (2.0µg)
m-Chlorophenol (2.0µg)
p-Chlorophenol (4.0µg)

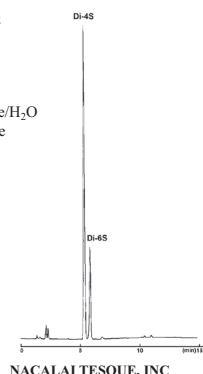


AP-1043

COSMOSIL Application Data

Column: Cholesterol
 Column size: 4.6mm I.D. -150mm
 Mobile phase: A; 1mmol/l Tetrabutylammonium bisulfate/H₂O
 B; 1mmol/l Tetrabutylammonium bisulfate
 -Acetonitrile/H₂O=67/33
 B conc. 20%→65%(7min)→65%(12min)
 Flow rate: 1.0 ml/min
 Temperature: 40°C
 Detection: UV240nm

Sample: Chondroitin Sulfate A
 Chondroitinase AC-II digested

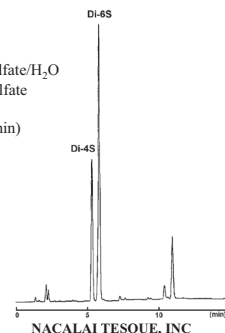


AP-1082

COSMOSIL Application Data

Column: Cholesterol
 Column size: 4.6mm I.D. -150mm
 Mobile phase: A; 1mmol/l Tetrabutylammonium bisulfate/H₂O
 B; 1mmol/l Tetrabutylammonium bisulfate
 -Acetonitrile/H₂O=67/33
 B conc. 20%→65%(7min)→65%(12min)
 Flow rate: 1.0 ml/min
 Temperature: 40°C
 Detection: UV240nm

Sample: Chondroitin Sulfate C
 Chondroitinase AC-II digested

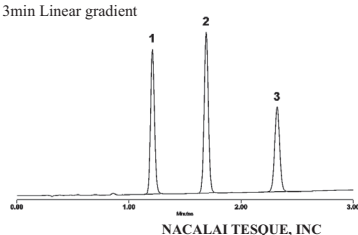


AP-1083

COSMOSIL Application Data

Column: 2.5Cholesterol
 Column size: 2.0mm I.D. -50mm
 Mobile phase: A; 0.1% Formic Acid-H₂O
 B; 0.1% Formic Acid-Acetonitrile
 B conc. 70→90% 3min Linear gradient
 Flow rate: 0.4 ml/min
 Temperature: 30°C
 Detection: UV250nm

Sample: 1; Chrysophanol
 2; Emodin
 3; Physcion
 Inj. Vol.: 0.5µl

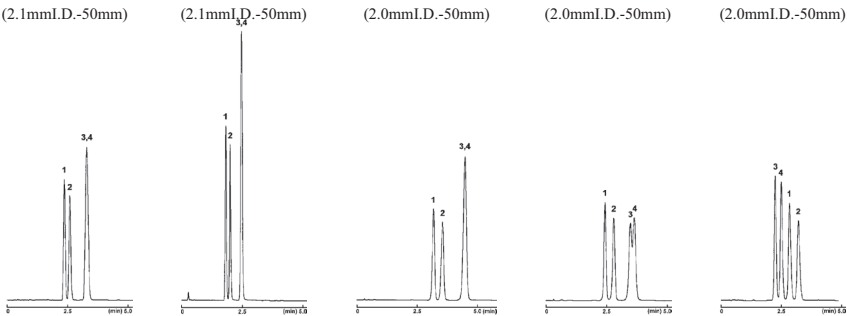


Data courtesy of a LKT Laboratories, Inc

AP-1293

COSMOSIL Application Data

	Competitor 1.7 μ m C ₁₈ (2.1mm I.D.-50mm)	Competitor 2.6 μ m(Core) C ₁₈ (2.1mm I.D.-50mm)	2.5C ₁₈ -MS-II (2.0mm I.D.-50mm)	2.5Cholester (2.0mm I.D.-50mm)	2.5INAP (2.0mm I.D.-50mm)
Column:					
Column size:					
Mobile phase:	C ₁₈ : Choleste; Methanol/ H ₂ O = 40/60 INAP; Methanol/ H ₂ O = 55/45				
Flow rate:	0.4 ml/min				
Temperature:	40°C				
Detection:	UV254nm				
Sample:	1; Prednisone (0.375mg/ml) 2; Cortisone (0.375mg/ml) 3; Prednisolone (0.375mg/ml) 4; Hydrocortisone (0.375mg/ml)				
Inj. Vol:	0.5 μ l				

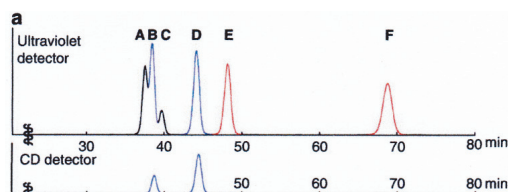
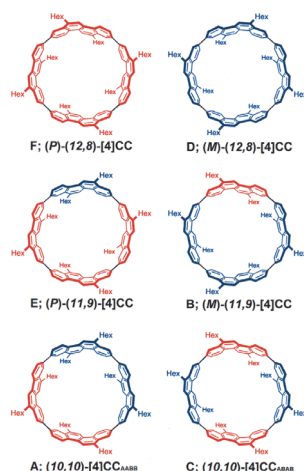


NACALAI TESQUE, INC

AP-1259

COSMOSIL Application Data

Column:	Cholester
Column size:	4.6mm I.D.-250mm $\times$ 3
Mobile phase:	Dichloromethane/Methanol = 60/40
Flow rate:	1.0 ml/min
Temperature:	40°C
Detection:	UV300nm, CD420nm
Sample:	[4]cyclo-2,8-chrysenylene ([4]CC)

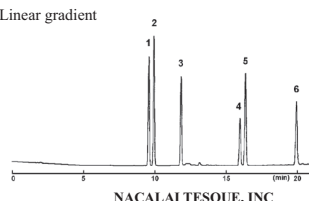


NACALAI TESQUE, INC

AP-1483

COSMOSIL Application Data

Column:	Cholester
Column size:	4.6mm I.D.-150mm
Mobile phase:	A: Acetonitrile/ 20mmol/l Phosphate buffer(pH2.5) = 10/90 B: Acetonitrile/ 20mmol/l Phosphate buffer(pH2.5) = 50/50 B conc. 0→100% 20min Linear gradient
Flow rate:	1.0 ml/min
Temperature:	30°C
Detection:	UV260nm
Sample:	1; Daidzin (0.05 μ g) 2; Glycitin (0.05 μ g) 3; Genistin (0.05 μ g) 4; Daidzein (0.05 μ g) 5; Glycitein (0.075 μ g) 6; Genistein (0.025 μ g)

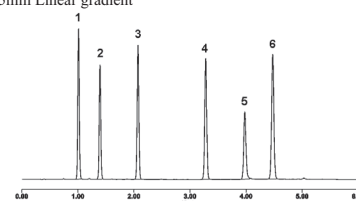


NACALAI TESQUE, INC

AP-0278

COSMOSIL Application Data

Column:	2.5Cholester
Column size:	2.0mm I.D.-50mm
Mobile phase:	A: 0.1% Formic Acid-H ₂ O B: 0.1% Formic Acid-Acetonitrile B conc. 15→45% 5min Linear gradient
Flow rate:	0.4 ml/min
Temperature:	30°C
Detection:	UV255nm
Sample:	1; Puerarin 2; Daidzin 3; Genistin 4; Daidzein 5; Quercetin 6; Genistein
Inj. Vol.:	0.5 μ l



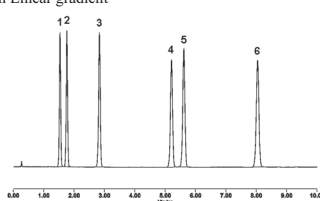
NACALAI TESQUE, INC

AP-1302

Data courtesy of a LKT Laboratories, Inc

COSMOSIL Application Data

Column:	2.5Cholester
Column size:	2.0mm I.D.-50mm
Mobile phase:	A: 0.1% Formic Acid-H ₂ O B: 0.1% Formic Acid-Acetonitrile B conc. 15→35% 10min Linear gradient
Flow rate:	0.4 ml/min
Temperature:	30°C
Detection:	UV255nm
Sample:	1; Daidzin 2; Glycitin 3; Genistin 4; Daidzein 5; Glycitein 6; Genistein
Inj. Vol.:	0.5 μ l



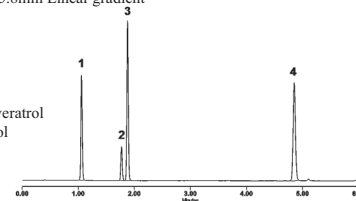
NACALAI TESQUE, INC

AP-1306

Data courtesy of a LKT Laboratories, Inc

COSMOSIL Application Data

Column:	2.5Cholester
Column size:	2.0mm I.D.-50mm
Mobile phase:	A: 0.1% Formic Acid-H ₂ O B: 0.1% Formic Acid-Acetonitrile B conc. 20→80% 5.8min Linear gradient
Flow rate:	0.4 ml/min
Temperature:	30°C
Detection:	UV280nm
Sample:	1; Polydatin 2; α,β -Dihydroresveratrol 3; <i>trans</i> -Resveratrol 4; Emodin
Inj. Vol.:	0.5 μ l



NACALAI TESQUE, INC

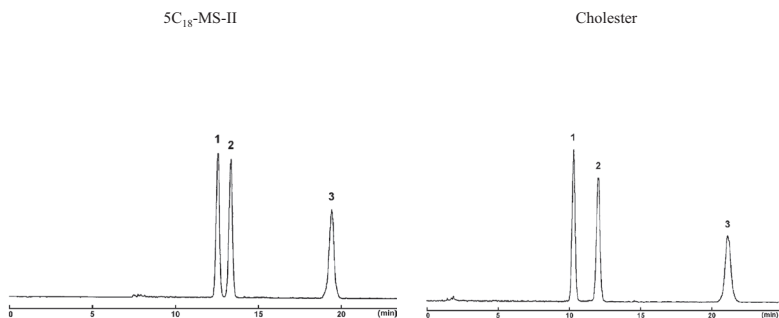
AP-1301

Data courtesy of a LKT Laboratories, Inc

COSMOSIL Application Data

Column: 5C₁₈-MS-II
 Column size: 4.6mm I.D.-150mm
 Mobile phase: 0.05%TFA-90%Methanol
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: ELSD

Sample: 1; Oleic Acid (3.0µg)
 2; Elaidic Acid (3.0µg)
 3; Stearic Acid [Octadecanoic Acid] (3.0µg)



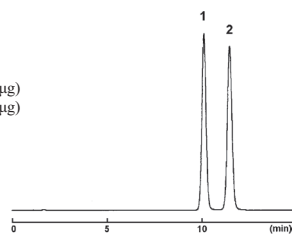
NACALAI TESQUE, INC

AP-1038

COSMOSIL Application Data

Column: Cholesterol
 Column size: 4.6mm I.D.-150mm
 Mobile phase: Acetonitrile/ H₂O = 40/60
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV280nm

Sample: 1; 17β-Estradiol (2.0µg)
 2; 17α-Estradiol (2.0µg)



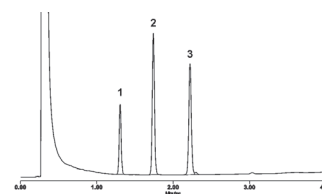
NACALAI TESQUE, INC

AP-0244

COSMOSIL Application Data

Column: 2.5Cholesterol
 Column size: 2.0mm I.D.-50mm
 Mobile phase: A; H₂O
 B; Acetonitrile
 B conc. 40→85% 3.5min Linear gradient
 Flow rate: 0.4 ml/min
 Temperature: 30°C
 Detection: UV205nm

Sample: 1; Limonin
 2; Evodiamine
 3; Rutaecarpine
 Inj. Vol.: 0.5µl



NACALAI TESQUE, INC

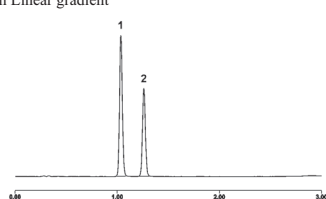
Data courtesy of a LKT Laboratories, Inc

AP-1300

COSMOSIL Application Data

Column: 2.5Cholesterol
 Column size: 2.0mm I.D.-50mm
 Mobile phase: A; 0.1% Formic Acid-H₂O
 B; 0.1% Formic Acid-Acetonitrile
 B conc. 60→80% 2.2min Linear gradient
 Flow rate: 0.4 ml/min
 Temperature: 30°C
 Detection: UV293nm

Sample: 1; Honokiol
 2; Magnolol
 Inj. Vol.: 0.5µl



NACALAI TESQUE, INC

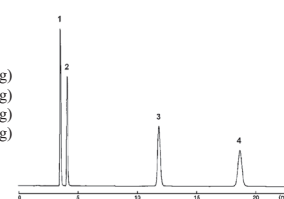
Data courtesy of a LKT Laboratories, Inc

AP-1303

COSMOSIL Application Data

Column: Cholesterol
 Column size: 4.6mm I.D.-150mm
 Mobile phase: Acetonitrile / 20mmol/l Phosphate buffer(pH2.5) = 50/50
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV280nm

Sample: 1; 7-Hydroxyflavone (0.2µg)
 2; 6-Hydroxyflavone (0.1µg)
 3; 3-Hydroxyflavone (0.5µg)
 4; 5-Hydroxyflavone (0.1µg)



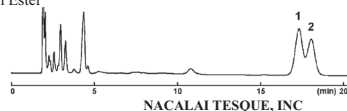
NACALAI TESQUE, INC

AP-0246

COSMOSIL Application Data

Column: Cholesterol
 Column size: 4.6mm I.D.-150mm
 Mobile phase: Methanol/ H₂O = 90/10
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV254nm

Sample: 1; Linolenic Acid
 p-Bromophenacyl Ester
 2; γ-Linolenic Acid
 p-Bromophenacyl Ester



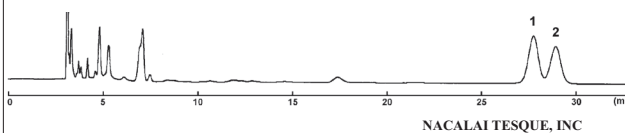
NACALAI TESQUE, INC

AP-0210

COSMOSIL Application Data

Column: Cholesterol
 Column size: 4.6mm I.D.-250mm
 Mobile phase: Methanol/ H₂O = 90/10
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV254nm

Sample: 1; Linolenic Acid p-Bromophenacyl Ester
 2; γ-Linolenic Acid p-Bromophenacyl Ester



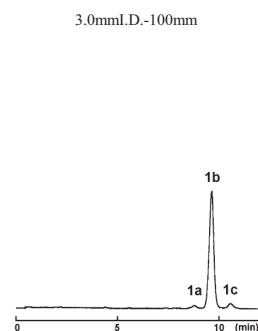
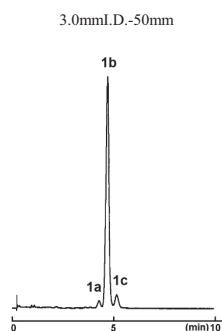
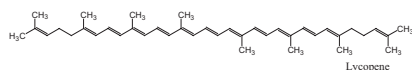
NACALAI TESQUE, INC

AP-0211

COSMOCORE Application Data

Column: COSMOCORE 2.6Cholester
Column size: 3.0mmI.D.-**mm
Mobile phase: Acetonitrile
Flow rate: 1.0 ml/min
Temperature: 40°C
Detection: UV470nm

Sample: Lycopene (1.0mg/ml)
Inj. Vol: 0.5µl



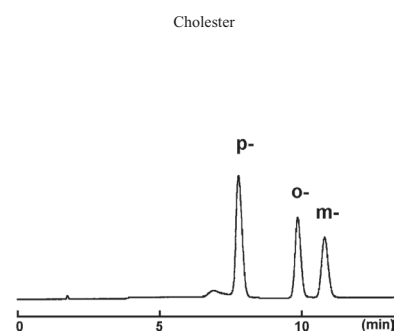
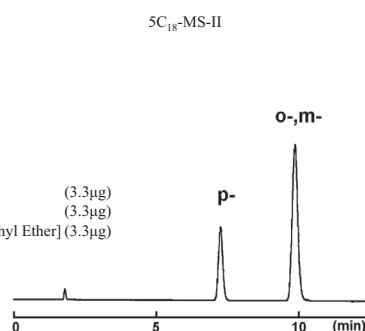
NACALAI TESQUE, INC

AP-1411

COSMOSIL Application Data

Column: 5C₁₈-MS-II
Column size: 4.6mmI.D.-150mm
Mobile phase: Methanol/ H₂O = 30/70
Flow rate: 1.0 ml/min
Temperature: 30°C
Detection: UV254nm

Sample: *o*-Methoxyphenol [Guaiacol] (3.3µg)
m-Methoxyphenol (3.3µg)
p-Methoxyphenol [Hydroquinone Monomethyl Ether] (3.3µg)



NACALAI TESQUE, INC

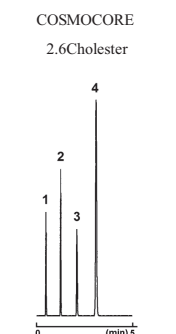
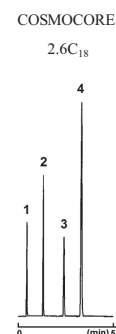
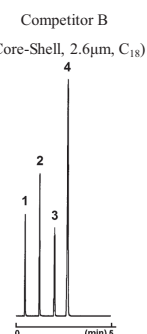
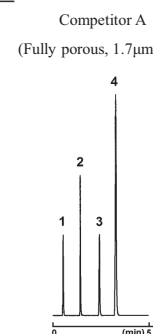
AP-1041

COSMOCORE Application Data

Column: 2.1mmI.D.-100mm
Column size: 2.1mmI.D.-100mm
Mobile phase: Acetonitrile/ H₂O = 50/50
Flow rate: 0.4 ml/min
Temperature: 40°C
Detection: UV254nm

Sample: 1; Uracil
2; Methyl Benzoate
3; Toluene
4; Naphthalene

Inj. Vol: 0.25µl



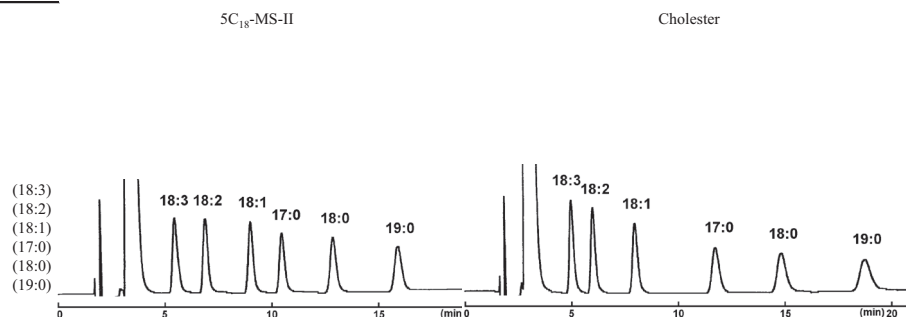
NACALAI TESQUE, INC

AP-1404

COSMOSIL Application Data

Column: 5C₁₈-MS-II
Column size: 4.6mmI.D.-150mm
Mobile phase: Methanol/ H₂O = 95/5
Flow rate: 1.0 ml/min
Temperature: 30°C
Detection: RI

Sample: Methyl Linolenate (18:3)
Methyl Linoleate (18:2)
Methyl Oleate (18:1)
Methyl Margarate (17:0)
Methyl Stearate (18:0)
Methyl Nonadecanoate (19:0)
(each 10µg)



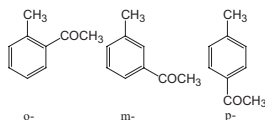
NACALAI TESQUE, INC

AP-1040

COSMOSIL Application Data

Column: COSMOSIL 5C₁₈-MS-II
 Column size: 4.6mm I.D.-150mm
 Mobile phase: Methanol / H₂O = */*
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV254nm

Sample: *o*-Methylacetophenone (0.15mg/ml)
m-Methylacetophenone (0.125mg/ml)
p-Methylacetophenone (0.075mg/ml)
 Inj. Vol: 1.0μl

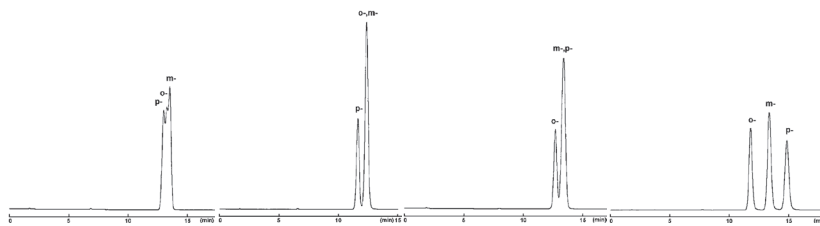


COSMOSIL 5C₁₈-MS-II
 (Methanol / H₂O = 45/55)

COSMOSIL Choleser
 (Methanol / H₂O = 45/55)

COSMOSIL πNAP
 (Methanol / H₂O = 50/50)

COSMOSIL 5PYE
 (Methanol / H₂O = 55/45)



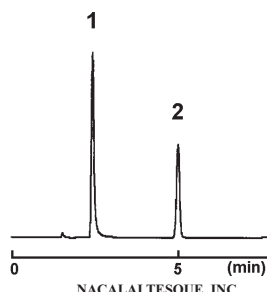
NACALAI TESQUE, INC

AP-1205

COSMOSIL Application Data

Column: Cholester
 Column size: 4.6mm I.D.-150mm
 Mobile phase: Acetonitrile/ H₂O = 30/70
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV254nm

Sample: 1; Pyridine (0.1μg)
 2; Phenol (0.1μg)



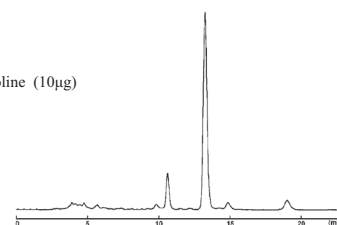
NACALAI TESQUE, INC

AP-0240

COSMOSIL Application Data

Column: Cholester
 Column size: 4.6mm I.D.-250mm
 Mobile phase: Methanol
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: ELSD

Sample: *L*-α-Phosphatidyl Choline (10μg)



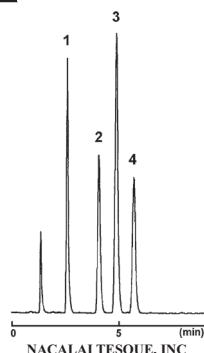
NACALAI TESQUE, INC

AP-0215

COSMOSIL Application Data

Column: Cholester
 Column size: 4.6mm I.D.-150mm
 Mobile phase: 0.05%TFA-40%Acetonitrile
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: ELSD

Sample: 1; Prostaglandin I₂ (2.0μg)
 2; Prostaglandin F_{2α} (2.0μg)
 3; Prostaglandin E₂ (2.0μg)
 4; Prostaglandin D₂ (2.0μg)



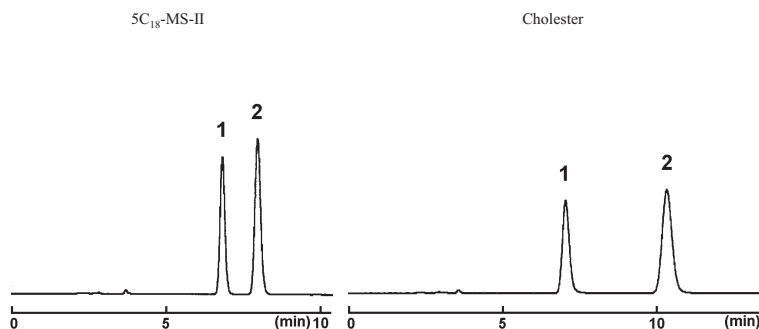
NACALAI TESQUE, INC

AP-0248

COSMOSIL Application Data

Column: 5C₁₈-MS-II
 Column size: 4.6mm I.D.-150mm
 Mobile phase: Methanol / 20mmol/l Phosphate buffer(pH2.5) = 90/10
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV350nm

Sample: 1; *13-cis*-Retinoic Acid (0.04μg)
 2; Vitamin A Acid, *all-trans* [all-trans-Retinoic Acid] (0.04μg)



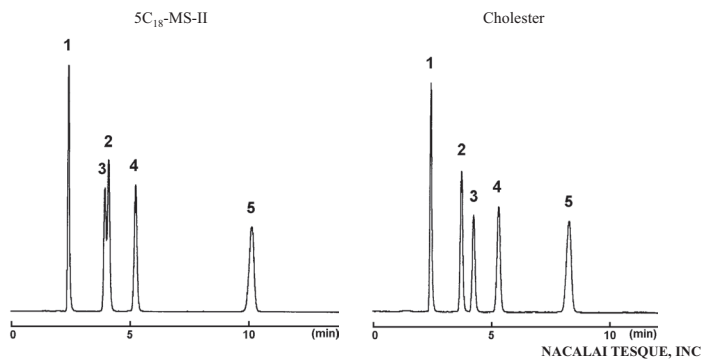
NACALAI TESQUE, INC

AP-1036

COSMOSIL Application Data

Column: 4.6mm I.D.-150mm
 Mobile phase: Acetonitrile/ H₂O = 45/55
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: ELSD, Gain=6

Sample: 1; Saikosaponin c (1.5µg)
 2; Saikosaponin a (1.5µg)
 3; Saikosaponin b₂ (1.5µg)
 4; Saikosaponin b₁ (1.5µg)
 5; Saikosaponin d (1.5µg)



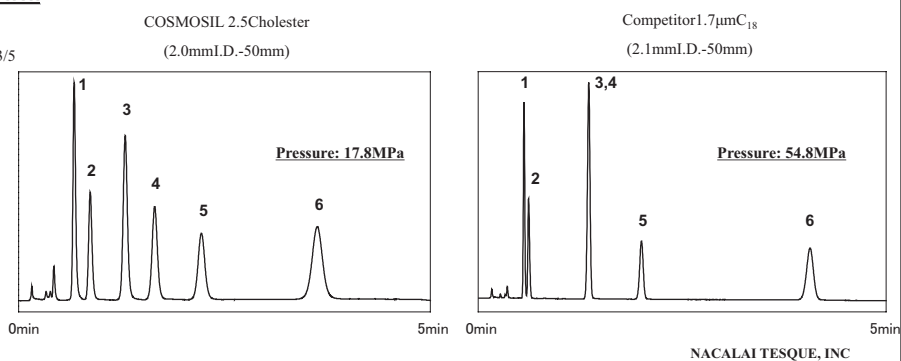
AP-1021

COSMOSIL Application Data

Mobile phase: Acetonitrile/ 0.05%NaH₂PO₄aq. = 3/5
 Flow rate: 0.7 ml/min
 Temperature: 50°C
 Detection: UV206nm

Sample: 1; Saikosaponin c
 2; Saikosaponin h
 3; Saikosaponin a
 4; Saikosaponin b₂
 5; Saikosaponin b₁
 6; Saikosaponin d

Injection Vol. 1.0µl

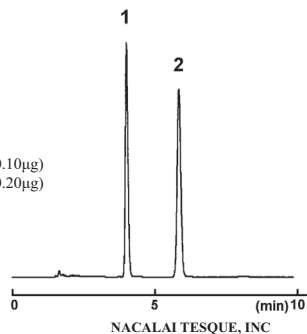


AP-1141

COSMOSIL Application Data

Column: Cholesterol
 Column size: 4.6mm I.D.-150mm
 Mobile phase: Methanol/ H₂O = 90/10
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV254nm

Sample: 1; *cis*-Stilbene (0.10µg)
 2; *trans*-Stilbene (0.20µg)

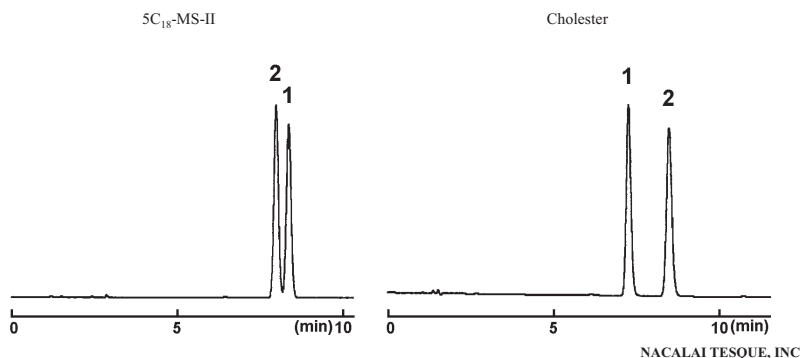


AP-1014

COSMOSIL Application Data

Column: 4.6mm I.D.-150mm
 Mobile phase: Acetonitrile/ H₂O = 70/30
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV254nm

Sample: 1; *cis*-Stilbene (0.10µg)
 2; *trans*-Stilbene (0.20µg)

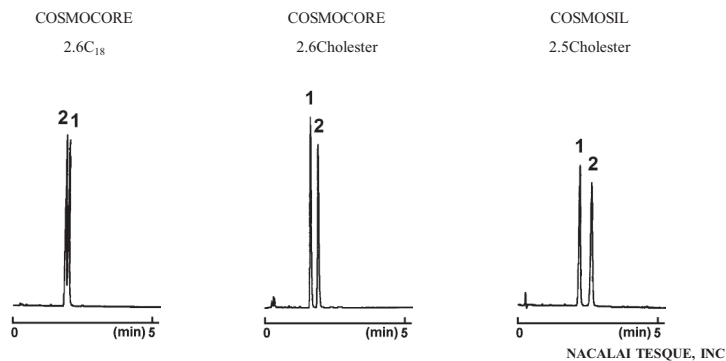
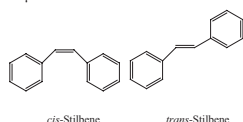


AP-1045

COSMOCORE Application Data

Column: (COSMOCORE) 2.1mm I.D.-50mm
 (COSMOSIL) 2.0mm I.D.-50mm
 Mobile phase: Acetonitrile/ H₂O = 60/40
 Flow rate: 0.4 ml/min
 Temperature: 40°C
 Detection: UV254nm

Sample: 1; *cis*-Stilbene (0.1mg/ml)
 2; *trans*-Stilbene (0.2mg/ml)
 Inj. Vol: 0.5µl

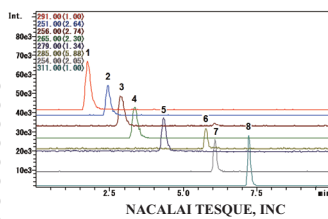


AP-1412

COSMOSIL Application Data

Column: 2.5Cholester
 Column size: 2.0mm I.D.-50mm
 Mobile phase: A; 0.1% Formic Acid-H₂O
 B; 0.1% Formic Acid-Acetonitrile
 B conc. 10→50% 5min Linear gradient
 Flow rate: 0.2 ml/min
 Temperature: 40°C
 Detection: ESI-MS, Positive, SIM

Sample: 1; Trimethoprim (10mg/L)
 2; Sulfadiazine (10mg/L)
 3; Sulfathiazole (10mg/L)
 4; Sulfamerazine (10mg/L)
 5; Sulfamethazine (10mg/L)
 6; Sulfachloropyridazine (10mg/L)
 7; Sulfamethoxazole (10mg/L)
 8; Sulfadimethoxine (10mg/L)
 Inj. Vol.: 5.0µl

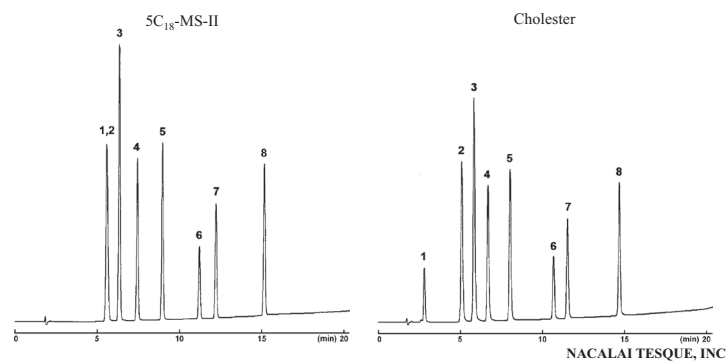


AP-1285

COSMOSIL Application Data

Column: 4.6mm I.D.-150mm
 Mobile phase: A; 0.1% Formic Acid-H₂O
 B; 0.1% Formic Acid-Acetonitrile
 B conc. 10→50% 20min Linear gradient
 Flow rate: 1.0 ml/min
 Temperature: 40°C
 Detection: UV254nm

Sample: 1; Trimethoprim (0.1mg/ml)
 2; Sulfadiazine (0.1mg/ml)
 3; Sulfathiazole (0.1mg/ml)
 4; Sulfamerazine (0.1mg/ml)
 5; Sulfamethazine (0.1mg/ml)
 6; Sulfachloropyridazine (0.1mg/ml)
 7; Sulfamethoxazole (0.1mg/ml)
 8; Sulfadimethoxine (0.1mg/ml)
 Inj. Vol.: 1.0µl

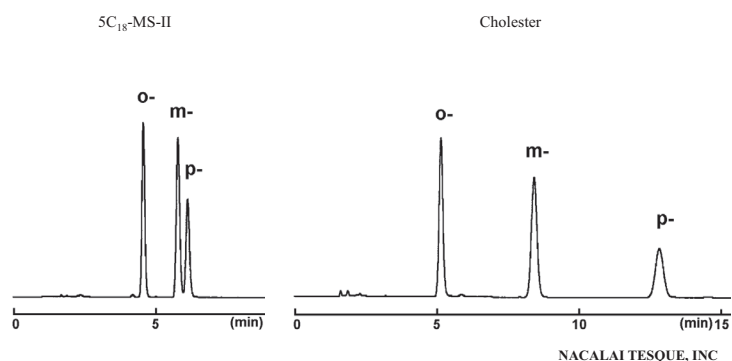


AP-1287

COSMOSIL Application Data

Column: 4.6mm I.D.-150mm
 Mobile phase: Methanol/ H₂O = 90/10
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV254nm

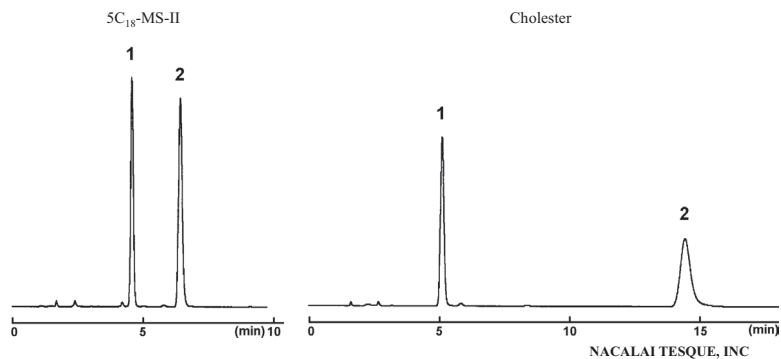
Sample: *o*-Terphenyl (0.15µg)
m-Terphenyl (0.05µg)
p-Terphenyl (0.075µg)



AP-1042

COSMOSIL Application Data

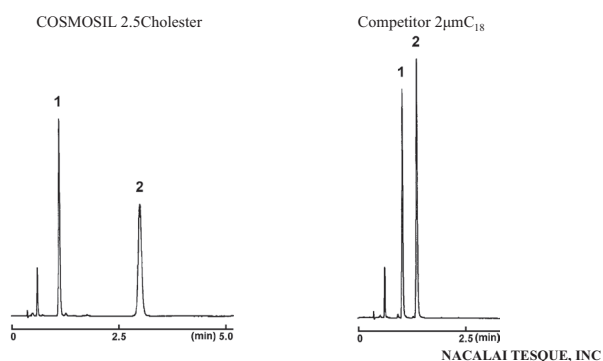
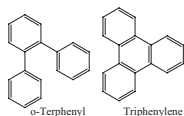
Column: 4.6mm I.D.-150mm
 Mobile phase: Methanol/H₂O = 90/10
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV254nm
 Sample: 1; *o*-Terphenyl (0.1 µg)
 2; Triphenylene (0.01 µg)



AP-1019

COSMOSIL Application Data

Column: 3.0mm I.D.-75mm
 Mobile phase: Methanol/H₂O = 90/10
 Flow rate: 1.0 ml/min
 Temperature: 40°C
 Detection: UV254nm
 Sample: 1; *o*-Terphenyl (0.05 µg)
 2; Triphenylene (0.005 µg)

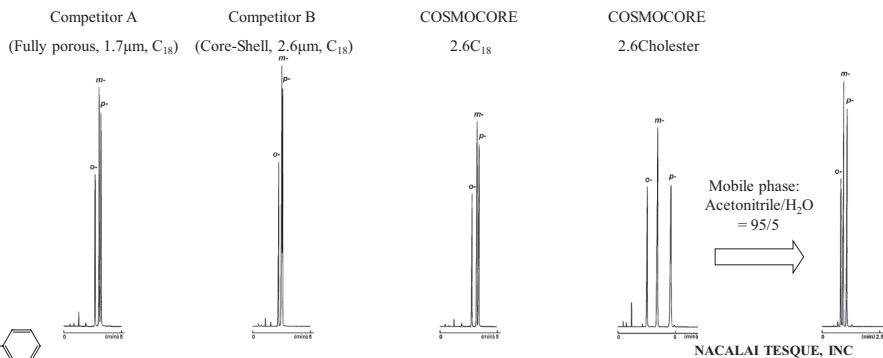
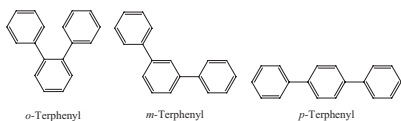


AP-1142

COSMOCORE Application Data

Column: 2.1mm I.D.-100mm
 Mobile phase: Acetonitrile/H₂O = 70/30
 Flow rate: 0.4 ml/min
 Temperature: 40°C
 Detection: UV254nm

Sample: *o*-Terphenyl (0.2mg/ml)
m-Terphenyl (0.1mg/ml)
p-Terphenyl (0.2mg/ml)
 Inj. Vol: 0.5 µl

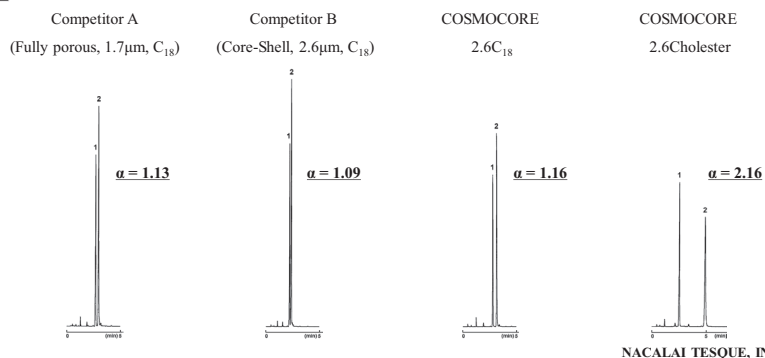
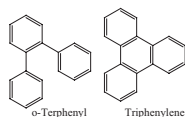


AP-1405

COSMOCORE Application Data

Column: 2.1mm I.D.-100mm
 Mobile phase: Acetonitrile/H₂O = 70/30
 Flow rate: 0.4 ml/min
 Temperature: 40°C
 Detection: UV254nm

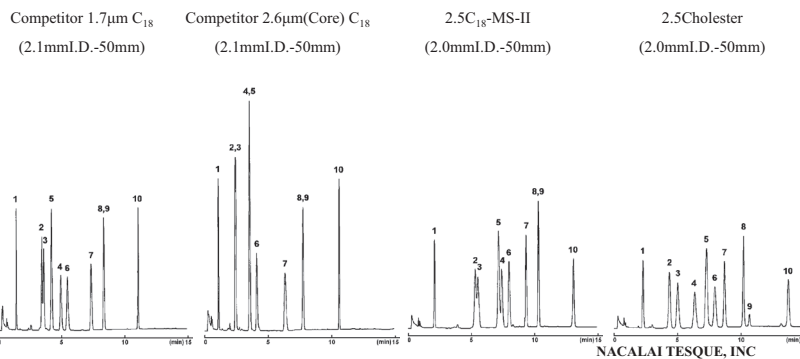
Sample: 1; *o*-Terphenyl (0.25mg/ml)
 2; Triphenylene (0.05mg/ml)
 Inj. Vol: 0.5 µl



AP-1406

COSMOSIL Application Data

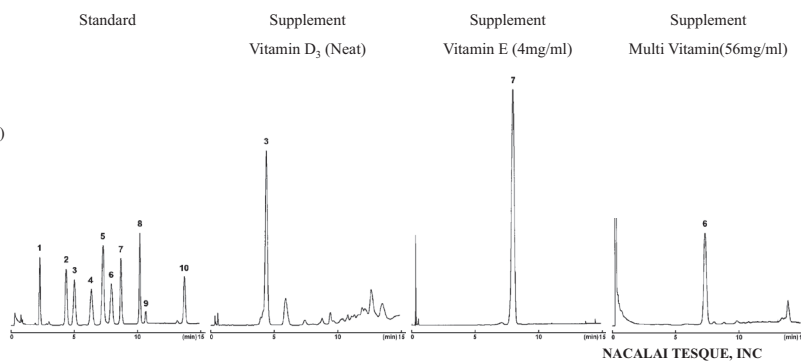
Mobile phase: A; 0.1% TFA-Methanol/ H₂O = 90/10
 B; 0.1% TFA-Methanol
 B conc. 0%(0-5min)-100%(10min)-100%(15min)
 Flow rate: 0.4 ml/min
 Temperature: 40°C
 Detection: UV280nm
 Sample:
 1; Vitamin A Acetate, *all trans* (0.06mg/ml)
 2; Vitamin D₃ [Calciferol] (0.30mg/ml)
 3; Vitamin D₃ (0.06mg/ml)
 4; Vitamin E Succinate [*D*- α -Tocopherol Succinate] (0.60mg/ml)
 5; Vitamin K₂ [Menatetrenone] (0.18mg/ml)
 6; Vitamin E [*DL*- α -Tocopherol] (0.60mg/ml)
 7; Vitamin E Acetate [*DL*- α -Tocopherol Acetate] (0.60mg/ml)
 8; *trans*-Vitamin K₁ (0.18mg/ml)
 9; *cis*-Vitamin K₁ (0.18mg/ml)
 10; Vitamin A Palmitate (0.18mg/ml)
 Inj. Vol: 2.5 μ l



AP-1261

COSMOSIL Application Data

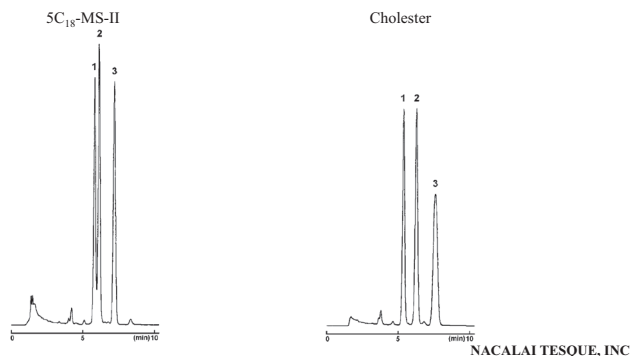
Column: 2.5Cholesterol
 Column size: 2.0mmI.D.-50mm
 Mobile phase: A; 0.1% TFA-Methanol/ H₂O = 90/10
 B; 0.1% TFA-Methanol
 B conc. 0%(0-5min)-100%(10min)-100%(15min)
 Flow rate: 0.4 ml/min
 Temperature: 40°C
 Detection: UV280nm
 Sample:
 1; Vitamin A Acetate, *all trans* (0.06mg/ml)
 2; Vitamin D₃ [Calciferol] (0.30mg/ml)
 3; Vitamin D₃ (0.06mg/ml)
 4; Vitamin E Succinate [*D*- α -Tocopherol Succinate] (0.60mg/ml)
 5; Vitamin K₂ [Menatetrenone] (0.18mg/ml)
 6; Vitamin E [*DL*- α -Tocopherol] (0.60mg/ml)
 7; Vitamin E Acetate [*DL*- α -Tocopherol Acetate] (0.60mg/ml)
 8; *trans*-Vitamin K₁ (0.18mg/ml)
 9; *cis*-Vitamin K₁ (0.18mg/ml)
 10; Vitamin A Palmitate (0.18mg/ml)
 Inj. Vol: 2.5 μ l



AP-1262

COSMOSIL Application Data

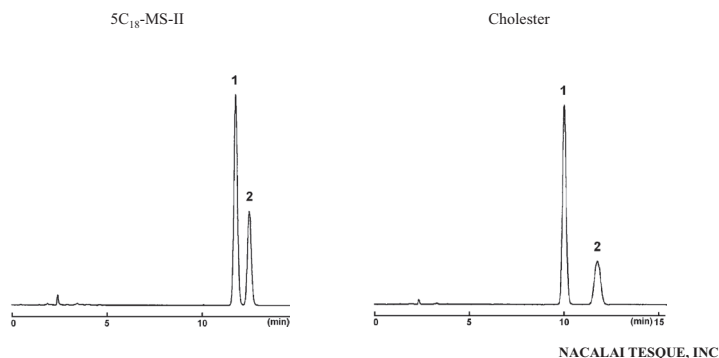
Column: 5C₁₈-MS-II
 Column size: 4.6mmI.D.-150mm
 Mobile phase: Methanol
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV280nm
 Sample:
 1; Vitamin D₂ [Calciferol] (1.25mg/ml)
 2; Vitamin D₃ (0.25mg/ml)
 3; Vitamin E [*DL*- α -Tocopherol] (2.50mg/ml)
 Inj.Vol.: 1.5 μ l



AP-1204

COSMOSIL Application Data

Column: 5C₁₈-MS-II
 Column size: 4.6mmI.D.-150mm
 Mobile phase: 0.05%TFA-90%Methanol
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: ELSD
 Sample:
 1; *cis*-Vaccenic Acid (3.0 μ g)
 2; *trans*-Vaccenic Acid (3.0 μ g)

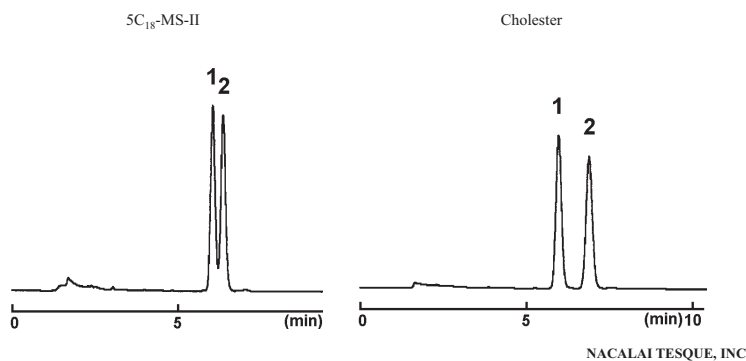


AP-1039

COSMOSIL Application Data

Column: 4.6mm I.D.-150mm
 Mobile phase: Methanol
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV265nm

Sample: 1; Vitamin D₂ [Calciferol] (0.3µg)
 2; Vitamin D₃ (0.1µg)

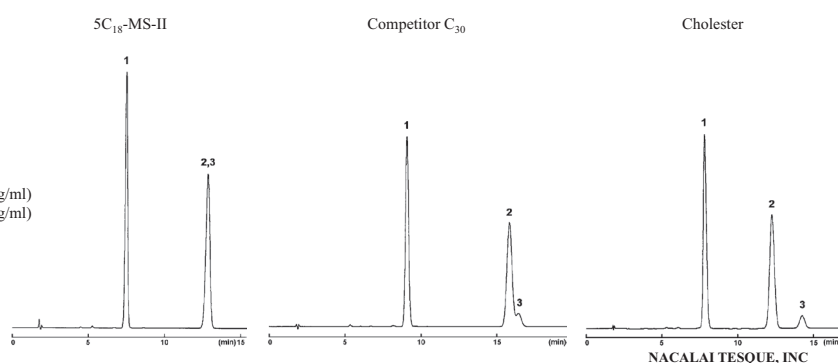


AP-1035

COSMOSIL Application Data

Column: 4.6mm I.D.-150mm
 Mobile phase: Methanol
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV280nm

Sample: 1; Vitamin K₂ [Menatetrenone] (0.25mg/ml)
 2; *trans*-Vitamin K₁ (0.25mg/ml)
 3; *cis*-Vitamin K₁
 Inj. Vol: 4.0µl

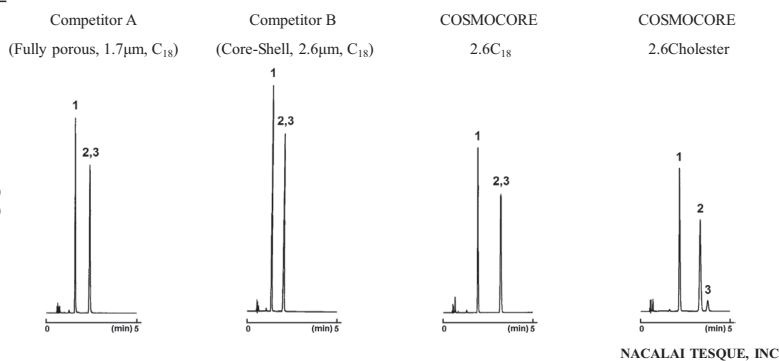
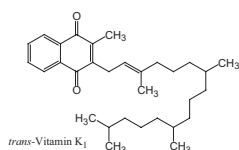


AP-1289

COSMOCORE Application Data

Column: 2.1mm I.D.-100mm
 Mobile phase: Methanol
 Flow rate: 0.4 ml/min
 Temperature: 40°C
 Detection: UV280nm

Sample: 1; Vitamin K₂ [Menatetrenone] (0.50mg/ml)
 2; *trans*-Vitamin K₁ (0.50mg/ml)
 3; *cis*-Vitamin K₁
 Inj. Vol: 0.5µl

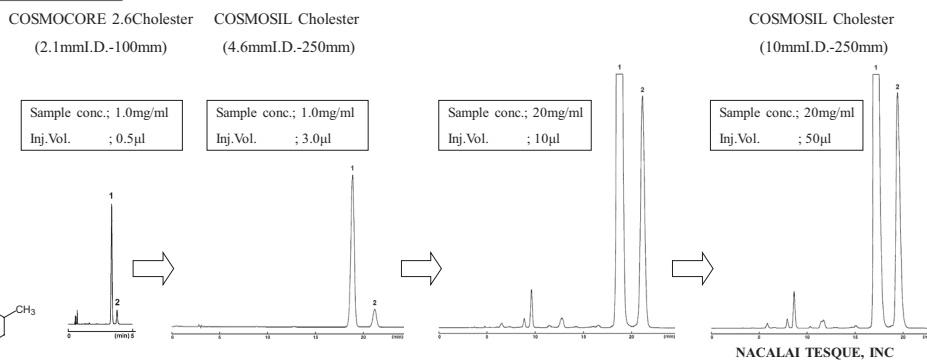
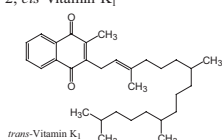


AP-1407

COSMOCORE Application Data

Column: 2.1mm I.D.-100mm
 Mobile phase: Methanol
 Flow rate: (2.1mm I.D.) 0.4 ml/min
 Temperature: 40°C
 Detection: UV280nm

Sample: 1; *trans*-Vitamin K₁
 2; *cis*-Vitamin K₁



AP-1408

ID について
AP-*: 弊社 Application Data
No.*: 掲載論文 No.

I.D	分析対象化合物	Page	I.D	分析対象化合物	Page
AP-1427	E-[¹³ C]ABP688	17	No.34	1-(3'-Azido-3'-deoxythymidine-5'-yl)-4-[3-O-(4'-benzhydryloxy-3',3'-dimethylsuccinyl)-lup-20(29)en-28-yl] 2,2-dimethylsuccinate	12
No.13	E-[¹³ C]ABP688	9	No.34	4-(3'-Azido-3'-deoxythymidine-5'-yl)-1-[3-O-(4'-benzhydryloxyglutaryl)-lup-28-yl] 2,2-dimethylsuccinate	12
AP-1427	Z-[¹³ C]ABP688	17	No.34	1-(3'-Azido-3'-deoxythymidine-5'-yl)-4-[3-O-(4'-benzhydryloxyglutaryl)-lup-28-yl] 2,2-dimethylsuccinate [No.44]	12
No.13	Z-[¹³ C]ABP688	9	AP-1032	Baicalein	20
No.1	Adenine	8	AP-1305	Baicalin	20
AP-1323	L-Adrenaline	17	No.49	7,12-BAQ	13
No.60	Agelasines Q	14	AP-1018	Benzene	18
No.60	Agelasines R	14	AP-1047	Benzene	20
AP-1482	5-Alkyl-1,2,3,4-tetrahydroquinolines (5aTHQs)	18	AP-1053	Benzene	21
No.20	5-Alkyl-1,2,3,4-tetrahydroquinolines (5aTHQs)	10	AP-1311	Benzene	21
No.61	Altenusin	14	No.27	Benzyl Alcohol β-D-Apiofuranosyl-(1 → 6)-β-D-(4-O-caffeoyl)glucopyranoside Hydrolyzed	11
No.61	Alternariol	14	No.28	Bergenin 11-O-(E)-Ferulate	11
No.61	Alternariol-5-O-methyl Ether	14	No.28	Bergenin 11-O-(Z)-Ferulate	11
No.61	Altetoxin II	14	AP-0234	Betamethasone	21
AP-1295	9-Aminocamptothecin	18	AP-0271	Betamethasone	21
AP-1018	Amylbenzene	18	AP-1260	Bibenzyl	21
AP-1296	trans-Anethole	18	AP-1304	Biochanin A	22
AP-1297	trans-Anethole	18	No.55	Biselyngbyaside B	14
AP-0238	Angiotensin I(Human)	19	No.63	Biselyngbyaside C	14
AP-0238	Angiotensin II(Human)	19	No.67	Biselyngbyolide A	15
AP-0242	Angiotensin II(Human)	19	No.55	Biselyngbyolide B	14
AP-0242	Angiotensin II, [Sar ¹ ,Ala ⁸]	19	AP-1046	Bromobenzene	22
AP-0242	Angiotensin II, [Sar ¹ ,Thr ⁸]	19	AP-0204	Bufalin	22
AP-0242	Angiotensin II, [Val ⁵]	19	AP-1144	Butyl p-Hydroxybenzoate	22
AP-0242	Angiotensin II, Des-Asp ¹ -[Ile ⁸]	19	AP-1018	n-Butylbenzene	18
No.30	Anhydrohirundigenin Monothevetoside	11	AP-1266	Caffeic Acid [3,4-Dihydroxycinnamic Acid]	22
AP-1260	Anthracene	21	AP-1267	Caffeic Acid [3,4-Dihydroxycinnamic Acid]	23
AP-1033	Apigenin	19	AP-1294	Caffeic Acid [3,4-Dihydroxycinnamic Acid]	23
AP-1292	Apigenin	19	AP-1310	Caffeic Acid [3,4-Dihydroxycinnamic Acid]	23
AP-1292P	Apigenin	19	AP-1072	Caffeine	23
AP-1296	Apigenin	18	AP-1077	Caffeine	24
AP-1297	Apigenin	18	AP-1138	Caffeine	24
AP-1298	Apigenin	19	AP-1140	Caffeine	24
AP-1299	Apigenin	20	AP-1266	Caffeine	22
No.45	Apigenin-7-O-rutinoside	13	AP-1267	Caffeine	23
AP-1291	Aristolochic Acid A	20	AP-1310	Caffeine	23
AP-1291	Aristolochic Acid B	20	AP-1403	Caffeine	24
AP-1291	Aristolochic Acid C	20	AP-1409	Caffeine	25
No.52	Armilaridin	14	AP-1035	Calciferol [Vitamin D ₂]	35
No.52	Armilarikin	14	AP-1204	Calciferol [Vitamin D ₂]	34
No.52	Armilarinin	14	AP-1261	Calciferol [Vitamin D ₂]	34
No.12	[¹³ C]ATRA (¹³ C-incorporated all-trans-retinoic Acid)	9	AP-1262	Calciferol [Vitamin D ₂]	34
No.34	4-(3'-Azido-3'-deoxythymidine-5'-yl)-1-[3-O-(4'-benzhydryl-3',3'-dimethylsuccinyl)-lup-28-yl] 2,2-dimethylsuccinate	12	No.68	Calyxamide A	15
No.34	4-(3'-Azido-3'-deoxythymidine-5'-yl)-1-[3-O-(4'-benzhydryloxy-3',3'-dimethylsuccinyl)-lup-20(29)en-28-yl] 2,2-dimethylsuccinate	12	No.68	Calyxamide B	15
No.34	1-(3'-Azido-3'-deoxythymidine-5'-yl)-4-[3-O-(4'-benzhydryl-3',3'-dimethylsuccinyl)-lup-28-yl] 2,2-dimethylsuccinate	11	No.43	Camelliasaponin A ₁	13

I.D	分析対象化合物	Page	I.D	分析対象化合物	Page
AP-1295	Camptothecin	18	No.30	Cynatratoside A	11
AP-1031	α -Carotene	25	No.78	DA16	16
AP-1031	β -Carotene	25	AP-0278	Daidzein	27
AP-1402	β -Carotene	25	AP-1302	Daidzein	27
AP-1410	β -Carotene	25	AP-1304	Daidzein	22
No.41	(+)-Catechin	13	AP-1306	Daidzein	27
No.42	Catechin	13	AP-0278	Daidzin	27
AP-1072	(-)-Catechin [(-)-C]	23	AP-1302	Daidzin	27
AP-1077	(-)-Catechin [(-)-C]	24	AP-1304	Daidzin	22
AP-1138	(-)-Catechin [(-)-C]	24	AP-1306	Daidzin	27
AP-1140	(-)-Catechin [(-)-C]	24	AP-0234	Dexamethasone	21
AP-1403	(-)-Catechin [(-)-C]	24	AP-0271	Dexamethasone	21
No.41	(-)-Catechin Gallate	13	No.77	Diborylated Chrysenes (2,8/2,9/3,9 positions)	16
No.42	Catechin Gallate	13	No.58	2,2'-Didebromonagelamide B	14
AP-1072	(-)-Catechin Gallate [(-)-Cg]	23	AP-1047	<i>o</i> -Difluorobenzene	20
AP-1077	(-)-Catechin Gallate [(-)-Cg]	24	AP-1053	<i>p</i> -Difluorobenzene	21
AP-1138	(-)-Catechin Gallate [(-)-Cg]	24	AP-1301	α, β -Dihydroresveratrol	27
AP-1140	(-)-Catechin Gallate [(-)-Cg]	24	AP-1266	3,4-Dihydroxycinnamic Acid [Caffeic Acid]	22
AP-1403	(-)-Catechin Gallate [(-)-Cg]	24	AP-1267	3,4-Dihydroxycinnamic Acid [Caffeic Acid]	23
AP-1044	<i>o</i> -Chloroacetophenone	26	AP-1294	3,4-Dihydroxycinnamic Acid [Caffeic Acid]	23
AP-1044	<i>m</i> -Chloroacetophenone	26	AP-1310	3,4-Dihydroxycinnamic Acid [Caffeic Acid]	23
AP-1044	<i>p</i> -Chloroacetophenone	26	No.45	(2 <i>R</i>)-3-(3,4-Dihydroxy phenyl)-2-hydroxypropionic Acid	13
AP-1046	Chlorobenzene	22	No.69	(<i>R,S</i>)-5,7-Dihydroxy-3-(1-hydroxyethyl)phthalides	15
AP-1266	Chlorogenic Acid	22	No.69	(<i>S,R</i>)-5,7-Dihydroxy-3-(1-hydroxyethyl)phthalides	15
AP-1267	Chlorogenic Acid	23	No.44	(7 α ,7' β ,8 α ,8' α)-3,4-Dihydroxy-3',4'-methylenedioxy-7,9':7',9-diepoxy lignane(EC-1-1)	13
AP-1310	Chlorogenic Acid	23	AP-1032	7,8-Dihydroxyflavone	20
AP-1409	Chlorogenic Acid	25	No.69	<i>cis</i> -4,6-Dihydroxymellein [No.8]	15
No.9	Chlorogenic Acid	9	No.31	2-(3,4-Dihydroxyphenyl)ethyl 3- <i>O</i> - β -D-allopyranosyl-6- <i>O</i> -caffeoyl- β -D-glucopyranoside	11
No.26	Chlorogenic Acid	11	AP-1311	<i>o</i> -Dinitrobenzene	21
No.26	Chlorogenic Acid Methyl Ester	11	AP-1311	<i>m</i> -Dinitrobenzene	21
AP-1043	<i>o</i> -Chlorophenol	26	AP-1311	<i>p</i> -Dinitrobenzene	21
AP-1043	<i>m</i> -Chlorophenol	26	No.36	3,9-Dinitrofluoranthene (DNF)	12
AP-1043	<i>p</i> -Chlorophenol	26	No.36	1,3-Dinitropyrene (1,3-DNP)	12
AP-1082	Chondroitin Sulfate A Chodrotinase AC-II digested	26	No.36	1,6-Dinitropyrene (1,6-DNP)	12
AP-1083	Chondroitin Sulfate C Chodrotinase AC-II digested	26	No.36	1,8-Dinitropyrene (1,8-DNP)	12
AP-1032	Chrysin	20	AP-1323	L-DOPA	17
AP-1293	Chrysophanol	26	No.11	L-DOPA	9
AP-0204	Cinobufagin	22	AP-1323	Dopamine	17
No.24	Cinobufagin	10	AP-1038	Elaidic Acid	28
No.35	Cinobufagin	12	AP-1293	Emodin	26
No.45	Clinopodic Acid E	13	AP-1301	Emodin	27
AP-0234	Cortisone	21	No.41	(-)-Epicatechin	13
AP-0271	Cortisone	21	No.42	Epicatechin	13
AP-1259	Cortisone	27	AP-1072	(-)-Epicatechin [(-)-EC]	23
AP-0271	Cortisone-21-Acetate	21	AP-1077	(-)-Epicatechin [(-)-EC]	24
AP-1144	Cortisone-21-Acetate	22	AP-1138	(-)-Epicatechin [(-)-EC]	24
No.26	<i>trans</i> - <i>p</i> -Coumaric Acid	11	AP-1140	(-)-Epicatechin [(-)-EC]	24
AP-1296	Coumarin	18	AP-1403	(-)-Epicatechin [(-)-EC]	24
AP-1297	Coumarin	18	No.41	(-)-Epicatechin Gallate	13
No.26	3- <i>O</i> - <i>cis</i> - <i>p</i> -Coumaroyl-D-quinic Acid	11	No.42	Epicatechin Gallate	13
No.26	3- <i>O</i> - <i>trans</i> - <i>p</i> -Coumaroyl-D-quinic Acid	11			
No.51	CsyB	14			
AP-1483	[4]Cyclo-2,8-chrysenylene ([4]CC)	27			

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AP-1072	(-)-Epicatechin Gallate [(-)-ECg]	23
AP-1077	(-)-Epicatechin Gallate [(-)-ECg]	24
AP-1138	(-)-Epicatechin Gallate [(-)-ECg]	24
AP-1140	(-)-Epicatechin Gallate [(-)-ECg]	24
AP-1403	(-)-Epicatechin Gallate [(-)-ECg]	24
No.41	(-)-Epigallocatechin	13
No.42	Epigallocatechin	13
AP-1072	(-)-Epigallocatechin [(-)-EGC]	23
AP-1077	(-)-Epigallocatechin [(-)-EGC]	24
AP-1138	(-)-Epigallocatechin [(-)-EGC]	24
AP-1140	(-)-Epigallocatechin [(-)-EGC]	24
AP-1403	(-)-Epigallocatechin [(-)-EGC]	24
No.41	(-)-Epigallocatechin Gallate	13
No.42	Epigallocatechin Gallate	13
AP-1072	(-)-Epigallocatechin Gallate [(-)-EGCg]	23
AP-1077	(-)-Epigallocatechin Gallate [(-)-EGCg]	24
AP-1138	(-)-Epigallocatechin Gallate [(-)-EGCg]	24
AP-1140	(-)-Epigallocatechin Gallate [(-)-EGCg]	24
AP-1403	(-)-Epigallocatechin Gallate [(-)-EGCg]	24
No.59	Epimagnolin	14
AP-0244	17 α -Estradiol	28
AP-0244	17 β -Estradiol	28
No.82	α -Estradiol	16
No.82	β -Estradiol	16
No.82	Estriol	16
No.82	Estrone	16
AP-1295	7-Ethyl 10-Hydroxycamptothecin	18
No.72	<i>cis</i> -[² H ₄ , ¹³ C ₂]-Ethyl 4-(4-{5-[(6-trifluoromethyl)pyridin-3-yl]amino}pyridin-2-yl) phenyl) cyclohexyl)acetate	15
No.72	<i>trans</i> -[² H ₄ , ¹³ C ₂]-Ethyl 4-(4-{5-[(6-trifluoromethyl)pyridin-3-yl]amino}pyridin-2-yl) phenyl) cyclohexyl)acetate	15
AP-1018	Ethylbenzene	18
No.74	O-Ethylxime-derivative of 1,5-Anhydro-D-fructose (AF-OH)	15
AP-1300	Evodiamine	28
No.32	Evodionol Methyl Ether	11
No.62	Fargesin	14
AP-1294	Ferulic Acid	23
No.49	2,3-FIQ	13
AP-1032	Fisetin	20
AP-1032	Flavone	20
No.33	Flavonol Acylglycosides	11
No.26	Florahydroside I	11
No.26	Florahydroside II	11
No.14	[¹⁸ F]Florbetapir ([¹⁸ F]AV-45)	9
AP-0271	Fluocinolone Acetonide	21
No.39	Fluorescence-labeled Fatty Acids derivatives (C16:0/C18:0/C18:1/ C18:2)	12
AP-1047	Fluorobenzene	20
AP-1053	Fluorobenzene	21
AP-0271	Fluorometholone	21
No.5	Foetidin	8
AP-1304	Formononetin	22
No.5	Free Ferulic Acid	8
No.66	Galgravin	15

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No.41	(-)-Galocatechin	13
No.42	Galocatechin	13
AP-1072	(-)-Galocatechin [(-)-GC]	23
AP-1077	(-)-Galocatechin [(-)-GC]	24
AP-1138	(-)-Galocatechin [(-)-GC]	24
AP-1140	(-)-Galocatechin [(-)-GC]	24
AP-1403	(-)-Galocatechin [(-)-GC]	24
No.41	(-)-Galocatechin Gallate	13
No.42	Galocatechin Gallate	13
AP-1072	(-)-Galocatechin Gallate [(-)-GCg]	23
AP-1077	(-)-Galocatechin Gallate [(-)-GCg]	24
AP-1138	(-)-Galocatechin Gallate [(-)-GCg]	24
AP-1140	(-)-Galocatechin Gallate [(-)-GCg]	24
AP-1403	(-)-Galocatechin Gallate [(-)-GCg]	24
AP-0278	Genistein	27
AP-1302	Genistein	27
AP-1304	Genistein	22
AP-1306	Genistein	27
AP-0278	Genistin	27
AP-1302	Genistin	27
AP-1304	Genistin	22
AP-1306	Genistin	27
No.30	Glaucogenin C	11
No.30	Glaucogenin C Mono-D-thevetoside	11
AP-0278	Glycitein	27
AP-1306	Glycitein	27
AP-0278	Glycitin	27
AP-1306	Glycitin	27
No.22	Grevillosides L	10
AP-1041	Guaiacol [o-Methoxyphenol]	29
AP-1292	Hesperetin	19
AP-1292P	Hesperetin	19
AP-1292	Hesperidin[Vitamin P]	19
AP-1292P	Hesperidin[Vitamin P]	19
No.37	Hippuric Acid	12
No.30	Hirundoside A	11
AP-1303	Honokiol	28
No.26	(+)-Hydrangenol 4'-O- β -D-glucopyranoside	11
No.26	Hydrangenol 8-O- β -D-glucopyranoside	11
No.26	Hydrangenol 8-O- β -D-glucopyranoside	11
AP-0234	Hydrocortisone	21
AP-0271	Hydrocortisone	21
AP-1259	Hydrocortisone	27
AP-1041	Hydroquinone Monomethyl Ether [p-Methoxyphenol]	29
No.69	5-Hydroxy-7-methoxy-3-(1-hydroxyethyl) phthalide [No.3]	15
No.61	3'-Hydroxyalternariol-5-O-methyl Ether	14
AP-1291	7-Hydroxyaristolochic Acid A	20
AP-1295	10-Hydroxycamptothecin	18
No.52	13-Hydroxydihydromelleolide	14
AP-0246	3-Hydroxyflavone	28
AP-1032	3-Hydroxyflavone	20
AP-0246	5-Hydroxyflavone	28

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AP-1032	5-Hydroxyflavone	20	AP-1041	<i>o</i> -Methoxyphenol [Guaiacol]	29
AP-0246	6-Hydroxyflavone	28	AP-1041	<i>m</i> -Methoxyphenol	29
AP-1032	6-Hydroxyflavone	20	AP-1041	<i>p</i> -Methoxyphenol [Hydroquinone Monomethyl Ether]	29
AP-0246	7-Hydroxyflavone	28	No.7	<i>cis</i> - Methyl 4-[5-[4-(4-Cyclohexyl-4-methoxypiperidin-1-yl)phenyl]-1,3,4-thiadiazol-2-yl]cyclohexane-1-carboxylate	9
AP-1032	7-Hydroxyflavone	20	No.7	<i>trans</i> - Methyl 4-[5-[4-(4-Cyclohexyl-4-methoxypiperidin-1-yl)phenyl]-1,3,4-thiadiazol-2-yl]cyclohexane-1-carboxylate	9
No.52	13-Hydroxymelleolide K	14	AP-1404	Methyl Benzoate	29
No.6	6 β -Hydroxytestosterone	8	AP-1294	Methyl Caffate	23
No.26	4-Hydroxythunberginol G 3'-O- β -D-glucopyranoside	11	AP-1040	Methyl Linoleate	29
No.3	IAPP-Alexa532	8	AP-1040	Methyl Linolenate	29
AP-0204	Indometacin [Indomethacin]	22	AP-1040	Methyl Margarate	29
AP-1295	Irinotecan	18	AP-1040	Methyl Nonadecanoate	29
No.32	Isoevodionol	11	AP-1040	Methyl Oleate	29
AP-1292	Kaempferol	19	AP-1040	Methyl Stearate	29
AP-1292P	Kaempferol	19	No.19	[<i>N</i> -Methyl- ¹³ C] Vorozole	9
No.59	Kobusin	14	No.73	<i>E</i> -4-Methyl-2-dimethylphenylsilylmethylprope nal	15
No.54	Kurahamide	14	No.73	<i>Z</i> -4-Methyl-2-dimethylphenylsilylmethylprope nal	15
No.57	Kurahyne	14	AP-1205	<i>o</i> -Methylacetophenone	30
No.78	LA16	16	AP-1205	<i>m</i> -Methylacetophenone	30
AP-1300	Limonin	28	AP-1205	<i>p</i> -Methylacetophenone	30
AP-0210	Linolenic Acid <i>p</i> -Bromophenacyl Ester	28	No.44	(7 α , 7' β , 8 α , 8' α)-3,4-Methylenedioxy-3',4'- dihydroxy-7,9 :7',9'-diepoxylignane (EC-1-2)	13
AP-0211	Linolenic Acid <i>p</i> -Bromophenacyl Ester	28	No.76	(5 <i>Z</i> ,7 <i>E</i>)-(1 <i>R</i> ,3 <i>R</i>)-2,2-(Methyleneoxy)methano- 9,10- <i>seco</i> -5,7,10(19)-cholestatriene 1,3,25-Triol	16
AP-0210	γ -Linolenic Acid <i>p</i> -Bromophenacyl Ester	28	No.76	(5 <i>Z</i> ,7 <i>E</i>)-(1 <i>R</i> ,3 <i>S</i>)-2,2-(Methyleneoxy)methano- 9,10- <i>seco</i> -5,7,10(19)-cholestatriene 1,3,25-Triol	16
AP-0211	γ -Linolenic Acid <i>p</i> -Bromophenacyl Ester	28	No.76	(5 <i>Z</i> ,7 <i>E</i>)-(1 <i>S</i> ,3 <i>R</i>)-2,2-(Methyleneoxy)methano- 9,10- <i>seco</i> -5,7,10(19)-cholestatriene 1,3,25-Triol	16
No.4	Lipstatin	8	No.76	(5 <i>Z</i> ,7 <i>E</i>)-(1 <i>S</i> ,3 <i>S</i>)-2,2-(Methyleneoxy)methano- 9,10- <i>seco</i> -5,7,10(19)-cholestatriene 1,3,25-Triol	16
AP-1032	Luteolin	20	No.52	5'-O-Methylmelledonal	14
AP-1292	Luteolin	19	No.48	Microcystin-LR	13
AP-1292P	Luteolin	19	No.26	α -Morroneiside	11
AP-1296	Luteolin	18	No.16	<i>p</i> -[¹⁸ F]MPPF	9
AP-1297	Luteolin	18	No.16	<i>p</i> -MPPNO ₂	9
AP-1298	Luteolin	19	No.2	Mycosporine-like Amino Acids	8
AP-1402	Lycopene	25	AP-1032	Myricetin	20
AP-1410	Lycopene	25	AP-1292	Myricetin	19
AP-1411	Lycopene	29	AP-1292P	Myricetin	19
No.40	<i>E</i> -Lycopene	13	AP-1404	Naphthalene	29
No.65	<i>E</i> -Lycopene	15	AP-1033	Naringenin	19
No.40	<i>Z</i> -Lycopene	13	AP-1299	Naringenin	20
No.65	<i>Z</i> -Lycopene	15	AP-1033	Naringin	19
AP-1303	Magnolol	28	AP-1299	Naringin	20
No.64	Makomotindoline	15	No.26	Neochlorogenic Acid	11
No.32	Melicobisquinolinone B	11	AP-1295	9-Nitro-20(<i>S</i>)-camptothecin	18
No.32	Melicodenine B	11	AP-1299	Nobiletin	20
No.32	Melicodenine D	11	No.10	Nobiletin	9
No.32	Melicodenine F	11	No.46	Nobiletin	13
No.32	Melicodin A	11	No.53	Nocapyrone L	14
No.32	Melicodin B	11	No.53	Nocapyrone R	14
No.32	Melicodin C	11	AP-1323	L-Noradrenaline	17
No.52	Melleolide	14			
No.52	Melleolide D	14			
AP-1261	Menatetrenone [Vitamin K ₂]	34			
AP-1262	Menatetrenone [Vitamin K ₂]	34			
AP-1289	Menatetrenone [Vitamin K ₂]	35			
AP-1407	Menatetrenone [Vitamin K ₂]	35			
AP-1032	6-Methoxyflavone	20			

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No.19	Norvorozole	10
AP-1038	Octadecanoic Acid [Stearic Acid]	28
AP-1294	<i>n</i> -Octyl 3,4-Dimethylcaffeate	23
AP-1294	<i>n</i> -Octyl 3-Methylcaffeate	23
AP-1294	<i>n</i> -Octyl Caffeate	23
AP-1038	Oleic Acid	28
No.38	Oleic Acid Esters of Phytosterols	12
AP-0238	Oxytocin	19
No.45	(S)-PGME	13
AP-1294	Phenethyl Caffeate	23
AP-0240	Phenol	30
AP-1294	Phenylethyl 3,4-Dimethylcaffeate	23
AP-1294	Phenylethyl 3-Methylcaffeate	23
AP-0215	L- α -Phosphatidyl Choline	30
No.26	(3 <i>R</i>)-Phylodulcin 8- <i>O</i> - β -D-glucopyranoside	11
No.26	(3 <i>S</i>)-Phylodulcin 8- <i>O</i> - β -D-glucopyranoside	11
AP-1293	Physcion	26
AP-1301	Polydatin	27
AP-0234	Prednisolone	21
AP-0271	Prednisolone	21
AP-1144	Prednisolone	22
AP-1259	Prednisolone	27
AP-0271	Prednisolone 21-Acetate	21
AP-1144	Prednisolone 21-Acetate	22
AP-1259	Prednisone	27
No.82	Progesterone	16
AP-1018	<i>n</i> -Propylbenzene	18
AP-0248	Prostaglandin D ₂	30
AP-0248	Prostaglandin E ₂	30
AP-0248	Prostaglandin F ₂ α	30
AP-0248	Prostaglandin I ₂	30
AP-1296	Psoralen	18
AP-1297	Psoralen	18
AP-1302	Puerarin	27
No.49	1,6-PyQ	13
No.49	1,8-PyQ	13
AP-0240	Pyridine	30
No.1	Pyridoxal	8
No.1	Pyridoxamine	8
No.1	Pyridoxine	8
No.71	Pyripyropene A	15
No.71	Pyripyropene B	15
No.71	Pyripyropene D	15
AP-1032	Quercetin	20
AP-1299	Quercetin	20
AP-1302	Quercetin	27
No.21	Rakicidin A	10
No.21	Rakicidin B	10
No.21	Rakicidin E	10
AP-0204	Resibufogenin	22
No.24	Resibufogenin	10
No.35	Resibufogenin	12
AP-1301	<i>trans</i> -Resveratrol	27
AP-1036	13- <i>cis</i> -Retinoic Acid	30

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AP-1036	<i>all-trans</i> -Retinoic Acid [Vitamin A Acid, <i>all-trans</i>]	30
No.70	<i>E</i> -Rosmarinic Acid	15
No.70	<i>Z</i> -Rosmarinic Acid	15
AP-1300	Rutaecarpine	28
AP-1299	Rutin	20
AP-1021	Saikosaponin a	31
AP-1141	Saikosaponin a	31
AP-1021	Saikosaponin b ₁	31
AP-1141	Saikosaponin b ₁	31
AP-1021	Saikosaponin b ₂	31
AP-1141	Saikosaponin b ₂	31
AP-1021	Saikosaponin c	31
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AP-1021	Saikosaponin d	31
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No.45	Salvianolic Acid B	13
No.47	Saturated or Unsaturated Fatty Acid Methyl Esters	12
No.25	Schoepfiajasmin F	10
AP-1296	Sedanolid	18
AP-1297	Sedanolid	18
No.30	Stauntosaponin A	11
No.30	Stauntosaponin B	11
AP-1038	Stearic Acid [Octadecanoic Acid]	28
AP-1014	<i>cis</i> -Stilbene	31
AP-1045	<i>cis</i> -Stilbene	31
AP-1412	<i>cis</i> -Stilbene	32
AP-1014	<i>trans</i> -Stilbene	31
AP-1045	<i>trans</i> -Stilbene	31
AP-1412	<i>trans</i> -Stilbene	32
AP-0238	Substance P	19
AP-1285	Sulfachloropyridazine	32
AP-1287	Sulfachloropyridazine	32
AP-1285	Sulfadiazine	32
AP-1287	Sulfadiazine	32
AP-1285	Sulfadimethoxine	32
AP-1287	Sulfadimethoxine	32
AP-1285	Sulfamerazine	32
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AP-1285	Sulfamethazine	32
AP-1287	Sulfamethazine	32
AP-1285	Sulfamethoxazole	32
AP-1287	Sulfamethoxazole	32
AP-1285	Sulfathiazole	32
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No.46	Tangeretin	13
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No.17	Telmisartan	10
No.15	[¹¹ C]Telmisartan	9
No.17	[¹¹ C]Telmisartan	10
No.18	[¹¹ C]Telmisartan	10
No.61	Tenuazonic Acid	14
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AP-1405	<i>o</i> -Terphenyl	33	AP-1204	Vitamin D ₂ [Calciferol]	34
AP-1406	<i>o</i> -Terphenyl	33	AP-1261	Vitamin D ₂ [Calciferol]	34
AP-1042	<i>m</i> -Terphenyl	32	AP-1262	Vitamin D ₂ [Calciferol]	34
AP-1405	<i>m</i> -Terphenyl	33	AP-1035	Vitamin D ₃	35
AP-1042	<i>p</i> -Terphenyl	32	AP-1204	Vitamin D ₃	34
AP-1405	<i>p</i> -Terphenyl	33	AP-1261	Vitamin D ₃	34
No.82	Testosterone	16	AP-1262	Vitamin D ₃	34
No.75	Tetraalkylpentacene Derivative	15	AP-1204	Vitamin E [DL- α -Tocopherol]	34
No.21	TetrahydroRakicidin A	10	AP-1261	Vitamin E [DL- α -Tocopherol]	34
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No.42	Theaflavin-3'-gallate	13	AP-1262	Vitamin E Acetate [DL- α -Tocopherol Acetate]	34
No.42	Theaflavin-3-gallate	13	AP-1261	Vitamin E Succinate [D- α -Tocopherol Succinate]	34
No.43	Theasaponin E ₃	13	AP-1262	Vitamin E Succinate [D- α -Tocopherol Succinate]	34
No.26	Thunberginol C 8- <i>O</i> - β -D-glucopyranoside	11	AP-1261	<i>cis</i> -Vitamin K ₁	34
No.26	Thunberginol D 3'- <i>O</i> - β -D-glucopyranoside	11	AP-1262	<i>cis</i> -Vitamin K ₁	34
No.26	Thunberginol G 3'- <i>O</i> - β -D-glucopyranoside	11	AP-1289	<i>cis</i> -Vitamin K ₁	35
No.26	Thunberginol G 8- <i>O</i> - β -D-glucopyranoside	11	AP-1407	<i>cis</i> -Vitamin K ₁	35
No.8	t-TMEGF4 peptides	9	AP-1408	<i>cis</i> -Vitamin K ₁	35
No.8	t-TMEGF5 peptides	9	AP-1261	<i>trans</i> -Vitamin K ₁	34
AP-1261	DL- α -Tocopherol Acetate [Vitamin E Acetate]	34	AP-1262	<i>trans</i> -Vitamin K ₁	34
AP-1262	DL- α -Tocopherol Acetate [Vitamin E Acetate]	34	AP-1289	<i>trans</i> -Vitamin K ₁	35
AP-1204	DL- α -Tocopherol [Vitamin E]	34	AP-1407	<i>trans</i> -Vitamin K ₁	35
AP-1261	DL- α -Tocopherol [Vitamin E]	34	AP-1408	<i>trans</i> -Vitamin K ₁	35
AP-1262	DL- α -Tocopherol [Vitamin E]	34	AP-1261	Vitamin K ₂ [Menatetrenone]	34
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AP-1262	D- α -Tocopherol Succinate [Vitamin E Succinate]	34	AP-1289	Vitamin K ₂ [Menatetrenone]	35
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AP-1262	Vitamin A Acetate, <i>all trans</i>	34			
AP-1036	Vitamin A Acid, <i>all-trans</i> [<i>all-trans</i> -Retinoic Acid]	30			
AP-1261	Vitamin A Palmitate	34			

Cholester 使用者様の声 "こんなに役立った情報"

■ COSMOSIL Cholester

提供者名	京都大学 生存圏研究所 バイオマス変換分野 西村 裕志 様
カラムサイズ	4.6 × 250
サンプル名	担子菌代謝物アルケニルイタコン酸 ceriporic acid の異性体分離 参考) Phytochemistry (2008) 69, 2593-2602.
内容	C ₁₈ カラムで分離が不十分であったアルケニルイタコン酸のシス/トランス異性体および類縁体をコスモシール Cholester により分離、分取し構造解析することができました。

提供者名	立命館大学 薬学部 生薬学研究室 池谷 幸信 教授
カラムサイズ	4.6 × 150
サンプル名	漢方配合生薬の抽出エキス
内容	他のタイプのカラムで分離しにくかったサポニンや配糖体についてよい分析チャートが得られた。

提供者名	京都大学大学院 農学研究科 食品生物科学専攻 農産製造学 小林 敬 助教
カラムサイズ	3.0 × 150
サンプル名	ステロイド類縁化合物
内容	ステロイド骨格を有する天然物の混合物を分離する際、構造が似通っており、従来の C ₁₈ カラムでは良好な分離が困難でしたが、コスモシール Cholester を用いることにより良好に分離し、定量できるようになりました。

提供者名	金城学院大学 薬学部 生薬学研究室 永津 明人 教授
カラムサイズ	4.6 × 150、その他
サンプル名	カテキン類
内容	コスモシール Cholester でカテキン類のラセミ体の分離が可能。

提供者名	医薬品メーカー研究者様
カラムサイズ	4.6 × 150
サンプル名	サイコサポニン
内容	弊社では生薬の品質管理にコスモシール Cholester を使用しております。 生薬は天然物であり多成分系の分析対象であるため、対象の成分ごとにその特異性に適したカラムを選択することが重要になります。コスモシール Cholester はサイコに特異的な選択性を示し、ODS では分離できなかったサポニン類縁成分が良好に分離できました。

提供者名	大学 薬学部 研究者様
カラムサイズ	4.6 × 250、10 × 250
サンプル名	生薬中に含まれるフェノール性化合物(フラボノイドなど)
内容	C ₁₈ カラムではなくコスモシール Cholester をファーストチョイスで使ってます。

提供者名	財団法人研究所 研究者様
カラムサイズ	4.6 × 250
サンプル名	リン酸化された低分子化合物、フェノール性化合物など
内容	コスモシール Cholester によってこれまで分離困難であった物質の分離が可能となった。 HILIC は条件検討中です。もう少し検討が必要。

提供者名	食品メーカー 研究者様
カラムサイズ	2.0 × 150
サンプル名	脂質、糖質、ステロイド類、脂溶性ビタミンなど
内容	コスモシール Cholester は、C ₁₈ とは異なる分離により、さまざまな物質の測定に利用できる。 MS 用のカラムとして十分利用できる。

提供者名	食品メーカー 研究者様
カラムサイズ	4.6 × 250
サンプル名	カテキン類、茶抽出物
内容	コスモシール Cholester は、かなり役立っております。 C ₁₈ カラムでは分離できなかったカテキン成分とカフェインが完全に分離でき、カテキン類の分離も良好であった。

提供者名	化学メーカー 研究者様
カラムサイズ	4.6 × 150
サンプル名	縮環系化合物の位置異性体
内容	C ₁₈ カラムで分離出来ないときの、特に位置異性体などの分離に関してセカンドチョイスとして使用させていただきます。

提供者名	大阪大学大学院 工学研究科生命先端工学専攻 生物工学講座 細胞工学領域 岡澤 敦司 助教
カラムサイズ	3.0 x 100
サンプル名	リグナン類
内容	特に問題なく測定できています。

提供者名	医薬品メーカー研究者様
カラムサイズ	2.0 × 50、2.0 × 100
サンプル名	サイコサポニン
内容	弊社では生薬の品質管理にコスモシール Cholester を使用しております。 生薬は天然物であり多成分系の分析対象であるため、対象の成分ごとにその特異性に適したカラムを選択することが重要になります。 コスモシール Cholester はサイコに特異的な選択性を示し、ODS では分離できなかったサポニン類縁成分が良好に分離できました。

提供者名	食品メーカー 研究者様
カラムサイズ	2.0 × 100
サンプル名	脂質、糖質、ステロイド類、脂溶性ビタミンなど
内容	コスモシール Cholester は、C ₁₈ とは異なる分離により、さまざまな物質の測定に利用できる。 MS 用のカラムとして十分利用できる。

各種 Cholester パンフレット

[illegible]



COSMOCORE

CosmShell 環境材料部 超高度 LC 用カラム

COSMOCORE 2.6Cholesteryl

● **コレステリル基型 Cosm-Shell カラム**

● **Ca²⁺ カラム など 2 相リソネーションによる高感度検出**

● **シス・トランス などとの異性体やオリフェノールなどの天然物の分離に有効**

● **Ca²⁺ カラムとの応用**

Ca²⁺ カラムは、天然物・医薬品・有機溶媒の分離に、極めて高い分離能力と高い検出感度を持つ。さらに CosmShell 2.6Cholesteryl に変更すると、分離能力と検出感度の両方をさらに向上させることが可能になります。

COSMOCORE Application Data

Column

CosmShell 2.6Cholesteryl

Mobile phase

Hexane/ethyl acetate

Flow rate

1.0 mL/min

Temperature

40 °C



● **天然物の分離**

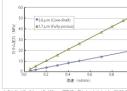
天然物 1,2-ジクロロエタン、1,1,2-トリクロロエタン、1,1,1-トリクロロエタンの分離は、CosmShell カラムと Ca²⁺ カラムの組み合わせにより、極めて高い分離能力と高い検出感度を持つ。さらに CosmShell 2.6Cholesteryl に変更すると、分離能力と検出感度の両方をさらに向上させることが可能になります。



図1 CosmShell 2.6Cholesteryl カラムの構造



図2 CosmShell 2.6Cholesteryl の構造



カラム名: CosmShell 2.6Cholesteryl (長さ: 150 cm, 内径: 4.6 mm, 粒子径: 5 μm)

検出器: 示差折光検出器



COSMOSIL

COSMOSIL 超高速 LC 用カラム

- 2.5 μm シリカゲル採用で高い分析能力
- 通常の HPLC 柱で超高速 LC 分析が可能
- 異なる極性を速く切り替えることで HPLC から HPLC 分散型でメソッド移行が容易

● 様々な溶媒組成で安定に使用可能なため、幅広い溶媒組成での分析が可能です。

● **ラインアップ**



商品名	2.5 μm シリカゲル	2.5 μm シリカゲル C18	2.5 μm シリカゲル C18 大孔径
固定相の種類	メチルシリカ	オクタデシル	オクタデシル
孔径 (nm)	100	100	300
適用溶媒	水相・有機相	有機相	有機相

※ 2.5 μm シリカゲル C18 大孔径は、通常の HPLC 柱よりも 2 倍以上の流速で分析が可能です。

※ 2.5 μm シリカゲル C18 大孔径は、通常の HPLC 柱よりも 2 倍以上の流速で分析が可能です。

● **超高速 LC での分析**

- **トータルバンスに優れた汎用型 C₁₈ カラム**

● **特徴**

- **Pre-packed & Safety Acid の HPLC 分析**

● **特徴**：超高速 LC 分析に最適な、トータルバンスに優れた汎用型 C₁₈ カラム。超高速 LC 分析に最適な、トータルバンスに優れた汎用型 C₁₈ カラム。超高速 LC 分析に最適な、トータルバンスに優れた汎用型 C₁₈ カラム。

COSMOSIL Application Data

溶媒組成	流速 (mL/min)	分析時間 (min)
水相	1.0	10
有機相	1.0	10

COSMOSIL Application Data

溶媒組成	流速 (mL/min)	分析時間 (min)
水相	1.0	10
有機相	1.0	10



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0120-489-552

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Tel:075-211-2703 Fax:075-211-2673

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*外観および仕様は改良のため、予告なく変更する場合がございますのでご了承ください。

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