

Molecular Weight Markers

for SDS-PAGE and Western Blotting

Description

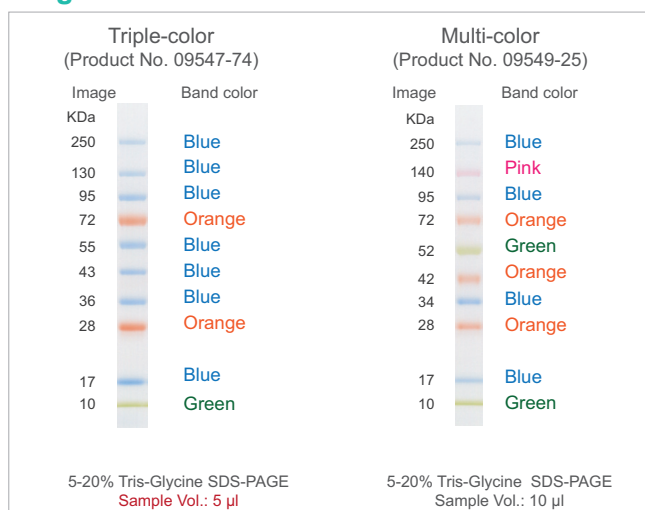
In addition to an existing Protein Markers, Nacalai Tesque launched two new products, Protein Ladder One and Chemi-Lumi One Markers Kit. Protein Ladder One contains 10 highly purified recombinant proteins to provide sharp bands and clear background. Chemi-Lumi One Markers Kit consists of biotinylated proteins and HRP conjugated streptavidin. Each band can be visualized on a western blot by the same chemiluminescent reagents for the target protein.

Protein Ladder One for SDS-PAGE

Features

- ▶ Sharp bands for accurate M.W. estimation
- ▶ Available in triple-color and multi-color.

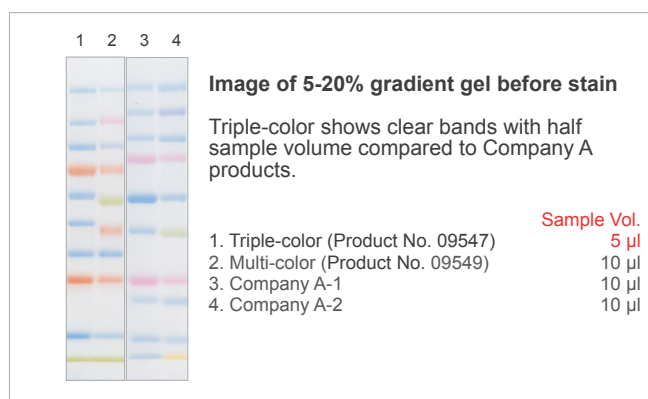
Images



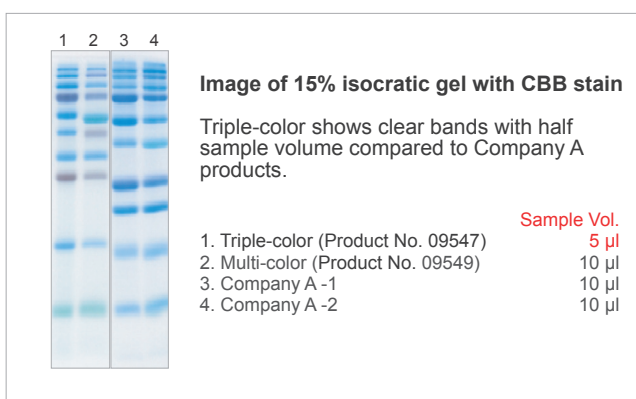
Compositions

33%(v/v) Glycerin, 2%(w/v) SDS, 10mM DTT, 1mM EDTA, 1mM NaN₃, 62.5mM Tris-H₃PO₄, pH 7.5

Comparison 1



Comparison 2



Ordering information

Product Name	Grade	Storage	Product No.	PKG Size
Protein Ladder One, Triple-color (Broad Range) for SDS-PAGE (50 tests)	SP	F	09547-74	250 µl
Protein Ladder One, Multi-color (Broad Range) for SDS-PAGE (50 tests)	SP	F	09549-25	500 µl

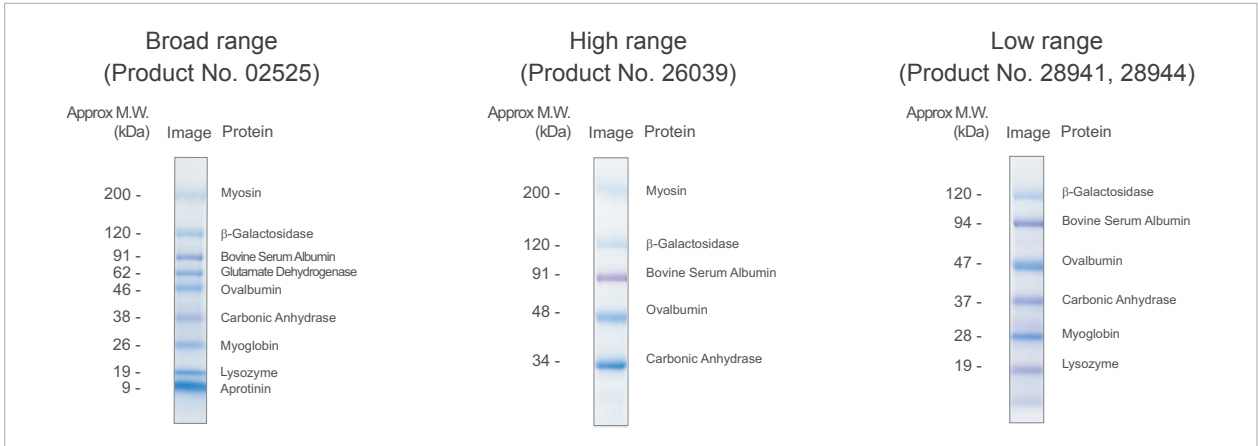
Prestained Protein Markers for SDS-PAGE

Features

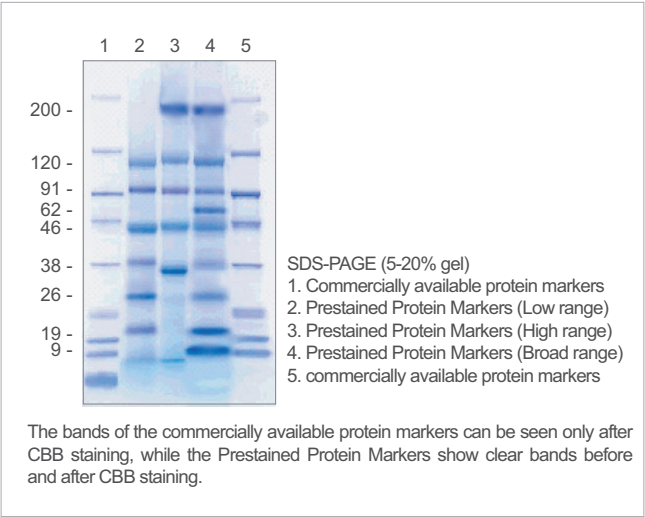
- ▶ Only small amount to use: high concentration of prestained proteins.
- ▶ Marker proteins are visible during electrophoresis.
- ▶ Prestained bands remain visible after the gel is stained (CBB, silver, negative).
- ▶ Applicable for CBB staining, silver staining (1:100 dilution) and negative staining (1:100 dilution).

Easy identification: alternate blue and violet stained bands
Great lot-to-lot consistency: for reliable comparison

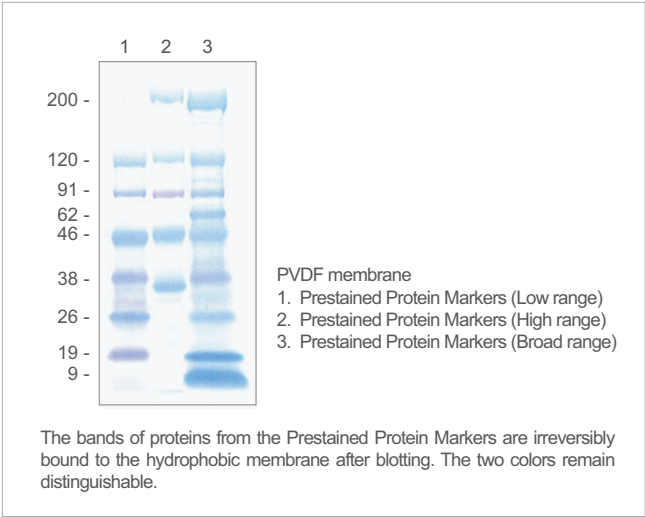
Images



CBB Staining



Western blotting



Ordering Information

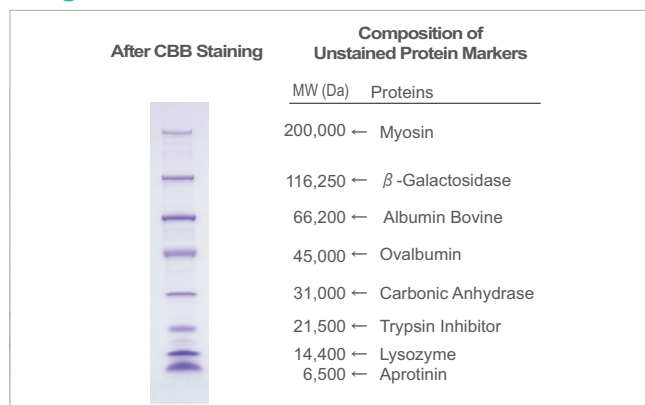
Product Name	Grade	Storage	Product No.	PKG Size
Prestained Protein Markers (Broad Range) for SDS-PAGE	SP	F	02525-35	500 μ l
Prestained Protein Markers (High Range) for SDS-PAGE	SP	F	26039-75	500 μ l
Prestained Protein Markers (Low Range) for SDS-PAGE	SP	F	28941-75	500 μ l
			28944-74	5 x100 μ l

Unstained Protein Markers (10x) for SDS-PAGE

Features

- Contains 8 kinds of protein (M.W. 6,500 - 200,000 Da)

Images



Composition

Contains approx. 3.4 mg of total proteins in 50(v/v)% glycerol, 0.3 M NaCl, 0.1 M DTT, 2 mM EDTA $\cdot$ 2Na, 3 mM NaN_3 , 10 mM Tris-HCl (pH 7.0)

Ordering Information

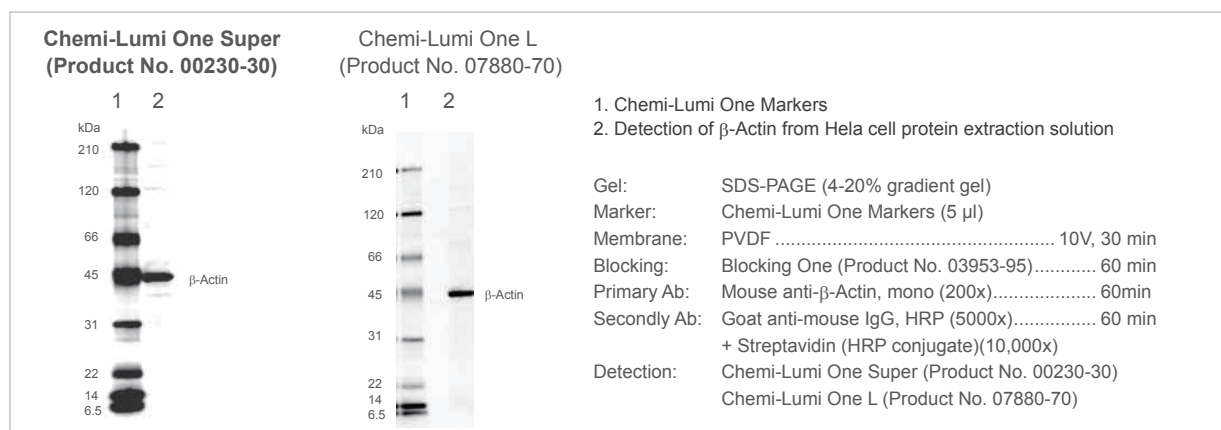
Product Name	Grade	Storage	Product No.	PKG Size
Protein Markers (M.W. 6,500 - 200,000)(10x) for SDS-PAGE	SP	F	29458-24	200 μ l

Chemi-Lumi One Markers Kit for SDS-PAGE and Western Blotting

Features

- Contains 8 biotinylated proteins as molecular weight markers (M.W. 6,500 - 200,000 Da)
- Includes HRP conjugated Streptavidin to detect biotinylated proteins

Western Blotting for detecting of β -Actin



Components

Components	Proteins	M.W. (kDa)
1. Chemi-Lumi One Markers PKG Size: 50 μ l Solution of 8 biotinylated proteins	Myosin	210
	β -Galactosidase	120
	Bovine Serum Albumin	66
	Ovalbumin	45
	Carbonic Anhydrase	31
	Trypsin Inhibitor	22
	Lysozyme	14
	Aprotinin	6.5
2. Streptavidin (HRP conjugate) PKG Size: 250 μ l Horseradish peroxidase conjugated streptavidin solution		

Note: The molecular weight of Chemi-Lumi One Markers may slightly differ from unmodified proteins because of biotinylation.

Protocol

- Preparation for Chemi-Lumi One Markers
 - 1) Thaw Chemi-Lumi One Markers and mix thoroughly prior to use.
 - 2) Add 4 µl of deionized water, 5 µl of Sample Buffer Solution with 2-ME (2x) (Product No.30566) and 1 µl of Chemi-Lumi One Markers to a plastic tube (0.5-1.5 ml volume size). Mix thoroughly.
The mix ratio of deionized water: Sample Buffer Solution with 2-ME (2x) : Chemi-Lumi One Markers is 4: 5 :1.
 - 3) Cover the tube and incubate in a water bath (approx. 90°C) for 4 minutes.
 - 4) Cool the tube at room temperature for 10 minutes.
 - 5) Take 2-10 µl of the diluted Chemi-Lumi One Markers by micropipette and apply carefully into a well of a gel.
 - 6) Perform SDS-PAGE, western blotting and reaction of primary antibody.
- Reaction of Streptavidin (HRP Conjugate)
 - 1) Thaw Streptavidin (HRP conjugate) and mix gently prior to use.
 - 2) In case of 10cm x 10cm membrane, add 5 µl of Streptavidin (HRP Conjugate) in 50 ml of solution of HRP-conjugated secondary antibody. Mix gently. The mix ratio of Streptavidin (HRP Conjugate): secondary antibody solution is 1: 10,000.
 - 3) Cover the membrane with above solution [Streptavidin (HRP Conjugate) - secondary antibody mixed solution] and let stand at room temperature for 1hour.
 - 4) Wash the membrane with 100 ml tPBS (PBS including 0.05% Tween®20) for 3minutes, and then dispose tPBS . Repeat wash three times.
 - 5) Detect proteins on membrane with one of the following detection reagents.
 - Chemi-Lumi One L (Product No.07880)
 - Chemi-Lumi One Super (Product No.02230)
 - Peroxidase Stain Kit (Product No.26652)

Ordering information

Product Name	Grade	Storage	Product No.	PKG Size
Chemi-Lumi One Markers Kit	SP	F	06456-70	1 KIT

Related products

Product Name	Grade	Storage	Product No.	PKG Size
Gel Casting Reagents				
30(w/v)% - Acrylamide/Bis Mixed Solution (37.5:1)	SP	R	06144-05	500 ml
30(w/v)% - Acrylamide/Bis Mixed Solution (29:1)	SP	R	06141-35	500 ml
30(w/v)% - Acrylamide/Bis Mixed Solution(19:1), Nuclease tested	SP	R	07175-75	500 ml
40(w/v)% - Acrylamide/Bis Mixed Solution (37.5:1)	SP	R	06121-95	500 ml
40(w/v)% - Acrylamide/Bis Mixed Solution (29:1)	SP	R	06119-45	500 ml
40(w/v)% - Acrylamide/Bis Mixed Solution(19:1) , Nuclease tested	SP	R	06140-45	500 ml
Separating Gel Buffer Solution(4x) for SDS-PAGE	SP	RT	30651-05	500 ml
Stacking Gel Buffer Solution(4x) with Dye for SDS-PAGE	SP	R	09268-34	100 ml
Stacking Gel Buffer Solution(4x) for SDS-PAGE	SP	R	09267-44	100 ml
			32158-25	500 ml
10(w/v)%-Ammonium Peroxodisulfate Solution	SP	F	02634-34	10 ml
N,N,N',N'-Tetramethylethylenediamine	SP	RT	33401-72	25 g
Running Buffer				
Running Buffer Solution(10x) for PAGE	SP	RT	30340-91	1 L
Running Buffer Solution(10x) for SDS-PAGE, Tris-Glycine	SP	RT	30329-61	1 L
Gel Steins				
CBB Stain One(Ready To Use)	SP	RT	04543-51	1 L
Rapid Stain CBB Kit	SP	RT	30035-14	1 set
Dispotray(for minigel staining)		RT	06563-44	20 pieces
Western Blotting				
Chemi-Lumi One L	SP	R	07880-70	1 KIT
Chemi-Lumi One Super	SP	R	02230-30	1 KIT
Peroxidase Stain Kit for Immuno-blotting, Nuclease tested	SP	F	26652-70	1 KIT
Blocking One	SP	R	03953-95	500 ml
Blocking One-P	SP	R	05999-84	200 ml

(Storage) RT: Room temperature R: Refrigerator F: Freezer

For research use only, not intended for diagnostic or drug use.

NACALAI TESQUE, INC.

Nijo Karasuma, Nakagyo-ku, Kyoto 604-0855 JAPAN

TEL : +81-(0)75-251-1730

FAX : +81-(0)75-251-1763

Website : www.nacalai.com

E-mail : info.intl@nacalai.com