

Isotonic and Minimally Invasive Optical Clearing Reagent

SeeDB-Live/ACSF

This product allows fluorescent observation of neuronal activity while maintaining normal physiological functions by rendering the tissue transparent. Application of this product to acute brain slices has enabled, for the first time worldwide, non-invasive optical clearing of living tissue. This product is manufactured and sold by NACALAI TESQUE, INC. under a license from Kyushu University.

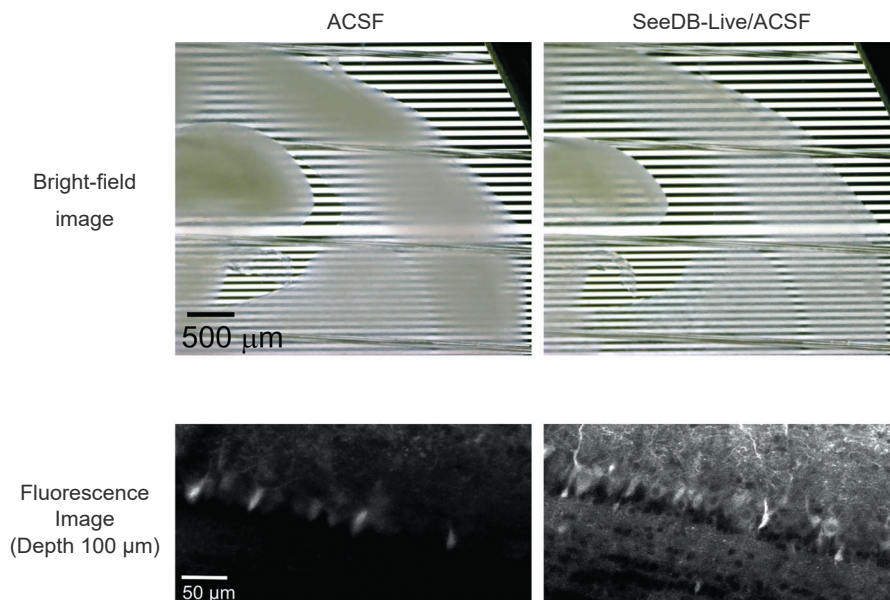
Features

- 01 Transparent brain tissue with preserved normal neuronal activity
- 02 Enabling deeper fluorescence imaging
- 03 Non-cytotoxic

Application

■ Bright-field and Fluorescence imaging of living brain tissue

Acute brain slices (300 μm thick) were prepared from P5 mice. After perfusion with ACSF and SeeDB-Live/ACSF, transmitted-light images were acquired. In a separate experiment, olfactory bulb slices from P13 Thy1-GCaMP6f mice were imaged using confocal microscopy.

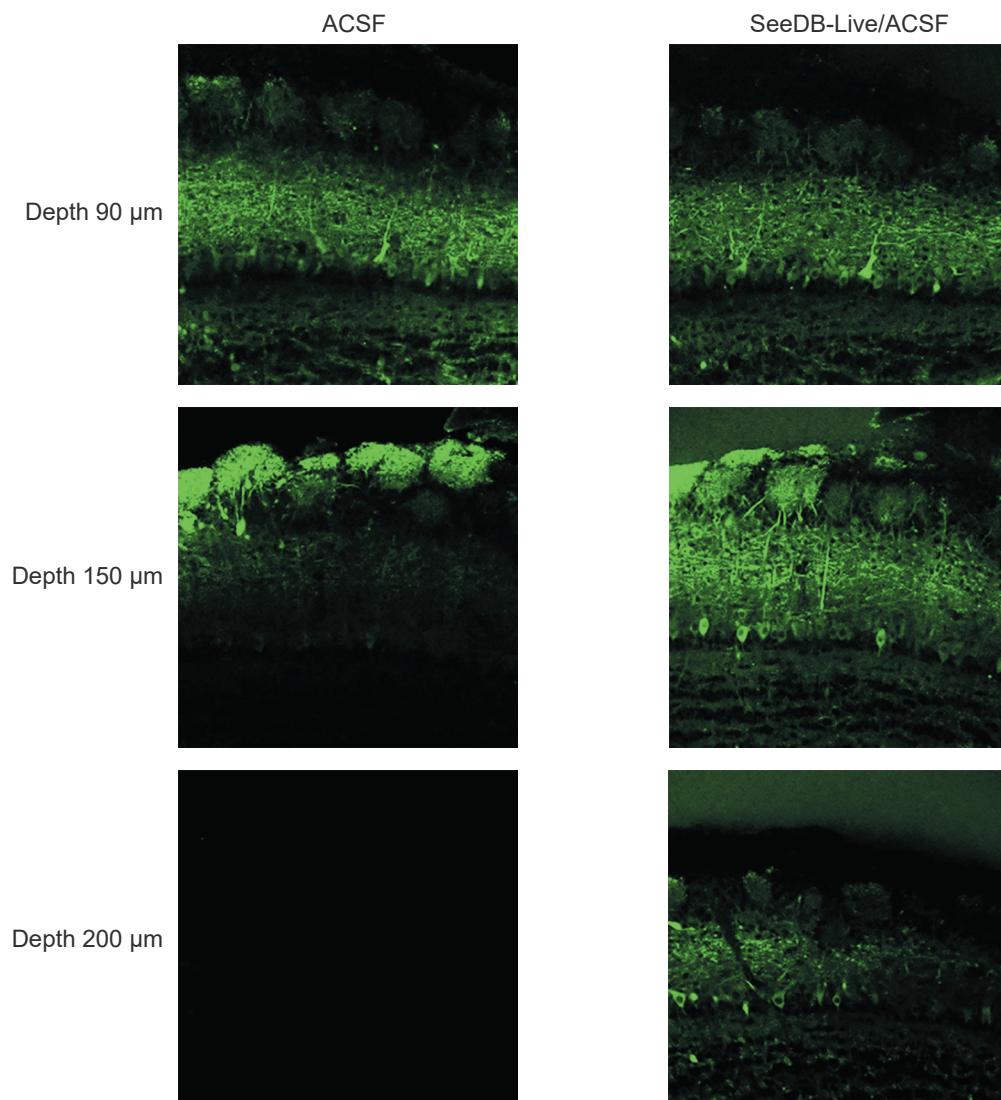


These data were provided by Professor Takeshi Imai and Assistant Professor Shigenori Inagaki, Faculty of Medical Sciences, University of Kyushu.

Application (cont.)

Calcium imaging in acute olfactory bulb slice from Thy1-GCaMP6f mice

Acute olfactory bulb slices from Thy1-GCaMP6f mice were optically cleared using either SeeDB-Live/ACSF or ACSF and imaged by two-photon microscopy. The results demonstrated that SeeDB-Live/ACSF enables deep imaging of live tissue while preserving normal cellular function.



Watch the video for these data here



These data were provided by Professor Takeshi Imai and Assistant Professor Shigenori Inagaki, Faculty of Medical Sciences, University of Kyushu.

References

Isotonic and minimally invasive optical clearing media for live cell imaging ex vivo and in vivo

Inagaki S, Nakagawa-Tamagawa N, Huynh NZ, et al. Nat Methods. 2026. DOI : <https://doi.org/10.1038/s41592-026-03023-y>

Ordering Information

Product Name	Grade	Storage	Product No.	PKG Size
SeeDB-Live/ACSF	SP	Refrigerate	23041-44	100 mL

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
Website : www.nacalai.com
E-mail : info.intl@nacalai.com