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Product No. 23041

SeeDB-Live/ACSF

In acute brain slices, optical clearing using this product enables deep tissue imaging while preserving physiological activity.
※This product is commercialized under a license from Kyushu University.

Other requirements

#22858-52 Artificial Cerebrospinal Fluid (ACSF)

Procedure (Acute Brain Slices)

(1) Expose the surface of SeeDB-Live/ACSF to 95% O_2 / 5% CO_2 gas for at least 2 hours to achieve gas saturation. Do not bubble the SeeDB-Live/ACSF solution as this will produce a lot of foam.
(2) Bubble ACSF with the same gas mixture for at least 30 minutes to achieve gas saturation.
(3) Dissect the brain from a mouse and prepare acute brain slices.
(4) Perfuse the acute brain slices with gas-saturated ACSF at room temperature for 1 hour to allow stabilization.
(5) Perfuse the slices with gas-saturated SeeDB-Live/ACSF at room temperature for 1 hour to perform optical clearing.
(6) Adjust the correction collar of the objective lens to optimal position and perform imaging while perfusing with SeeDB-Live/ACSF.
(7) For further details on the above usage example, as well as use in the brains of live mice, please refer to references.

Caution

- This product may be used with cultured cells and spheroids for short-term observation only; it is not suitable for long-term culture.
- If cell or tissue viability declines, sufficient optical clearing may not be achieved.
- Depending on the type of sample, optical clearing may not be effective.
- If this product is to be divided into portions, perform the operation in an aseptic environment.
- Keep the storage condition.(Do not freeze.)
- If precipitation or turbidity is observed in the product, discontinue use.
- Because this product contains animal-derived materials, lot-to-lot variability may occur; however, it does not substantially affect product performance.

Storage

Storage temperature is stated on the product label.

Expiration

Expiration date is stated on the product label.

Packing

100 mL (Product No. 23041-44)

Reference

Inagaki et al., Isotonic and minimally invasive optical clearing media for live cell imaging ex vivo and in vivo
Nature Methods. DOI:https://doi.org/10.1038/s41592-026-03023-y

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