

Technical Data Sheet

EMS Shield Mounting Medium With 4,6-diamidino-2-phenylindole (DAPI) and DABCO™

#17989-20, 17989-21

Description

Fluoroshield with DAPI is an aqueous mounting medium for preserving fluorescence of tissue and cell smears. This unique formula prevents rapid photobleaching of FITC, Texas Red, AMCA, Cy2, Cy3, Cy5, Alexa fluoro 488, Alexa fluoro 594, Green fluorescent protein (GFP), tetramethyl rhodamine, Redox, Phycoerythrin (RP-E), Phycocyanin (PC), and Allophycocyanin (APC). Fluorescence is retained during prolonged storage at 4°C in the dark. This medium does not contain phenylenediamine, which destroys immunofluorescence of Cy dyes, RP-E, PC and APC. This mounting medium is fortified with DAPI which is a counter-stain for DNA. This product is to be used *in situ* hybridization techniques or other methods where fluorescence of DNA staining is required. DAPI excites at 360nm and emits at 460nm, producing a **blue** fluorescence. RNA is also stained with DAPI.

May encounter problems with frozen brain or other frozen tissues with lots of fat.

Intended Use

Immunofluorescence, confocal microscopy

Reagent

Ready to use mounting medium

Refractive Index

1.364 ± 0.002 (This number applies to this mounting medium in solution. Refractive indexes change when the water solvent evaporates and mounting media dries on slides. We do not have the means to measure the refractive indexes of dry mounting mediums; however, we expect the numbers to go higher when dried. The refractive index of water is 1.3330.)

Storage

2-8°C, Protect from light, DO NOT FREEZE

Procedure

1. Bring the vial to room temperature.
2. Rinse slide to be mounted with distilled or deionized water; touch the edges of slide on a paper towel to remove excess water. Place slides on a flat surface away from light.
3. Turn the vial upside down and open the dropper to remove any air bubbles.
4. Apply 2-3 drops of mounting medium directly on top of the specimen.
5. Let stand at room temperature for about 3-5 minutes in the dark.
6. Apply cover slip, carefully avoiding air bubbles.
7. The specimen is ready for visualization under a microscope.
8. One can seal the edges of the cover slip with nail polish or any organic mounting medium. If a coverslip is not sealed, air bubbles will appear in few days.
9. Method for applying Coverslip: Put 1-2 drops of FLS on the specimen. After 3-4 minutes apply coverslip carefully avoiding air bubbles. Put Kimwipes on the top of coverslip, press gently to remove excess mounting medium. With 200 micropipette add organic mounting medium to seal the edges. Incubate at 37°C for one hour in the dark to dry organic mounting medium.
10. For long term storage it is recommended that the slide be stored in the dark at 2-8°C.

11. Removal of Coverslip: Coverslip can be removed before sealing the edges. Soak slide in warm (37°C) water for a few minutes. Carefully and slowly move the coverslip. Soak in water for an additional few minutes to remove coverslip. Rinse slide several times with warm water to remove all mounting medium. The slide can be remounted again.