MedaFluo™ Mounting Medium: MM001M, MM001L

Intended Use: For research use only

Introduction: MedaFluo™ Mounting Medium is an aqueous based mounting medium for preserving fluorescence staining signal on tissue section and cell smears. It contains anti-fade agent and prevents rapid photo bleaching of fluorophores. It is compatible with Medaysis dyes, DyLight®, FITC, Texas Red, AMCA, Cy® dyes, Alexa Fluor®, fluorescent nuclear stains, fluorescent proteins, fluorescent tracers, and most other fluorophores etc. The fluorescence is retained during prolonged storage at 4ºC in the dark. It does not contain phenylenediamine which destroys immunofluorescence of Cy dyes, R-PE, PC and APC..

Reagent Provided:

Reagent Descriptions	MM001M	MM001L
MedaFluo™ Mounting Medium (ready to use)	1 x 15ml	1 x 100ml

Storage and Stability: Store at 2-8ºC or freeze at -20ºC. Do not use the reagents if the expiration dates on the label have passed. Do not mix the reagents from different lot. If store at 2-8ºC the reagent will be good for about 12 months. Freeze at -20ºC will last around 24 months.

Warnings and Precautious:

1. For professional use.
2. The Material Safety Data Sheet is available upon request.
3. This product contains anti-fading agent and 0.05 % sodium azide as preservative. At this concentration, it is not classified as hazardous. However, NaN3 may react with lead and copper plumbing to form highly explosive build-ups of metal azides. Upon disposal, flush with large volumes of water to prevent metal azide build-up in plumbing.
4. Wear appropriate Personal Protective Equipment to avoid contact with eyes and skin.
5. Unused solution should be disposed of according to local, state and federal regulations.

Protocol Recommendations:

This product is used after immunofluorescence staining, should be applied when the specimen is still wet.
Bring MedaFluo™ Mounting Medium vial to room temperature.

1. 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.
2. Avoid air bubble from the medium. Apply 3-4 drops of mounting medium directly on top of the specimen and spread out evenly by tilting slide back and forth or spread evenly with a pipette tip making sure the tissue is not touched. Excess medium can be removed by touching the edges of slide against paper towel.
3. Let stand at room temperature for about 5 minutes.
4. Apply coverslip carefully avoiding air bubbles.
5. The specimen is ready for visualization under a fluorescent microscope. Be careful the coverslip can move at this point.
6. User can seal the edges of cover slip with nail polish or any organic medium. It is recommended to let slide sit flat in the dark under room temperature overnight before apply sealing media for optimal performance.
7. For storage it is recommended that the slide be stored in the dark at 2-8ºC.

Technical Notes:

Autofluorescence, arising from endogenous fluorophore such as porphyrins, lipofuscin, NADPH, flavins, collagen, elastin, tryptophan, tyrosine and phenylalanine etc., is an intrinsic property of cells and tissues. It can be problematic in immunofluorescence staining. Autofluorescence may also be caused by the fixatives used. It will interfere with detection of specific fluorescent signals, especially when the signals of interest are weak — it causes structures other than those of interest to become visible. Autofluorescence related to both the specific types of tissues and to the tissue processing procedures, including fixation. It is important for users to set up proper negative control slides to determine if there is any unwanted fluorescence due to either autofluorescence or nonspecific binding of fluorescent label. Please refer to references list at the end of the datasheet for recommendations of methods to reduce autofluorescence under variety circumstances. Recommend product: MedaFluo™ Autofluorescence Blocking Reagent Kit (Cat No. MB001L, MB001M).

Limitations:

Immunofluorescence is a multistep process and good results will depend on the proper handling and processing of the tissue both prior to and during staining. Improper fixation, freezing, thawing, washing, drying, heating, sectioning or contamination with other tissues or fluids may produce artifacts, antibody trapping, or false negative results. Inconsistent results may be due to variations in fixation and embedding methods, or to inherent irregularities within the tissue. Our warranty is limited to the actual price paid for the product. We are not liable for any property damage, personnel injury, time, effort or economic loss due to use our product.

References for reducing autofluorescence:

1. http://www.uhnresearch.ca/facilities/wcif/PDF/Autofluorescence.pdf
2. Herms J. Rommijn et al.Double Immunolabelling of Neuropeptides in the human hypothalamus as analyzed by confocal laser scanning fluorescence microscopy. The Journal of Histochemistry & Cytochemistry. Volume 47(2): 229-235, 1999.