

Mono AEC/Plus

K050
K050-110

Document #: DS-4022- C
Effective Date: 12/18/2023

Intended Use

For In Vitro Diagnostic Use

Summary and Explanation

Mono AEC/Plus is a single, highly stable, working AEC chromogen/substrate liquid solution. When used in conjunction with immunoperoxidase staining, AEC produces a red colored end product at the positive sites, yielding strong contrast when combined with a blue hematoxylin counter stain. AEC has been well accepted amongst pathologists because of its relatively less toxic nature as compared to DAB. Specimens stained using Mono AEC/Plus cannot be dehydrated in ethanol and hence need to be mounted in an aqueous-based mounting medium such as CC Mount (DBS catalog # K002).

Principles of the Procedures

Stable chromogen/substrate solution to be used in conjunction with peroxidase-based immunostaining systems.

Mono AEC/Plus is a single stable solution, therefore the solution is immediately ready for use. Thus, time is saved from preparing a working solution. As compared to typical DAB Substrate/Chromogen solutions, this single chromogen/substrate solution can be used up until the expiration date. Unused solution does not need to be immediately discarded, reducing waste.

Peroxidase reacts with H₂O₂ substrate to degrade it, which reacts with AEC, precipitating it at positive sites yielding a reddish brown colored product.

Reagents Provided

Kits Contents	30 mL	110 mL
Amber-Colored Ready to Use Mono AEC/Plus Solution	30 mL	110 mL

Materials Required But Not Provided

Some of the reagents and materials required for IHC are not provided. Pretreatment reagents, detection systems, control reagents and other ancillary reagents are available from Diagnostic BioSystems. Please refer to the Diagnostic BioSystems website at www.dbiosys.com.

Storage and Handling

Store at 2-8°C. Product is light-sensitive; protect from exposure to light and store in opaque bottle or in dark environment. Do not use beyond the expiration date stated on the label.

Staining Procedure

- Once sections have been incubated with peroxidase, wash sections with wash buffer.
- Wipe slides to remove excess buffer. Add enough drops of Mono AEC/Plus to cover tissue sections.
- Incubate for 5- 15 minutes at room temperature.

- For best results, observe reaction under a microscope for signal development.
- Once desired signal to noise ratio is achieved, stop reaction by washing slides in DI H₂O.

Recommendation:

For best color preservation and long term slide storage, we recommend using ImmunoHisto-Sealer (**K076**) after counterstaining.

Precautions

- Consult local and/or state authorities with regard to recommended method of disposal.
- Materials of human or animal origin should be handled as biohazardous materials and disposed of with proper precautions.
- Avoid microbial contamination of reagents. Contamination could produce erroneous results.
- This reagent may cause irritation. Avoid contact with eyes and mucous membranes.
- If reagent contacts these areas, rinse with copious amounts of water.
- Do not ingest or inhale any reagents.

Troubleshooting

If unexpected staining is observed which cannot be explained by variations in laboratory procedures and a problem is suspected, contact Diagnostic BioSystems Technical Support at (925) 484-3350, extension 2 or techsupport@dbiosys.com.