

DAB-Auto K081

Document #: DS-4027-C
Effective Date: 12/18/2023

Intended Use

For In Vitro Diagnostic Use

Summary and Explanation

DAB, a widely used chromogen for immunoperoxidase staining, is well accepted among pathologists because of its increased sensitivity and ability to give cleaner background as compared to amino ethylcarbazole (AEC). Specimens stained in DAB can be dehydrated, cleared, and mounted for permanent record keeping.

Principles of the Procedures

Substrate/chromogen in conjunction with peroxidase-based immunostaining systems.

Peroxidase from the antibody detection system reacts with H₂O₂ substrate to degrade it, which then reacts with DAB, precipitating it at positive sites yielding a dark brown color.

Catalog#	Vol ml	Buffer	Chromogen
K081-AUTO-S	6ml	6ml	6ml
K081-AUTO	30ml	30ml	30ml
K081-AUTO-110	110 ml	110ml	110ml
K081-AUTO-1L	1000ml	1000ml	1000ml

Reagents Provided

Preparation

- Mix DAB Chromogen Solution and DAB Substrate Buffer in a 1:1 ratio.
- The working DAB solution should be prepared in an opaque bottle.
- Any solution not used after this period should be discarded.
- On Board Mixing (Automation):** Instruments that have on-board mixing capability can load the chromogen and substrate-buffer components independently. Working solution is made mixing reagents 1:1 in on-board mixing station before application to slide.

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 away from light. Do not use product after the expiration date printed on vial. If reagents are stored under conditions other than those specified here, they must be verified by the user. Diluted reagents should be used promptly.

Staining Procedure

- After peroxidase incubation, wash tissue sections with wash buffer.
- Wipe slides removing excess buffer. Add enough drops of working DAB solution to cover tissue sections.
- Incubate for 5-10 minutes at room temperature. For optimal results, observe reaction under the microscope for signal development.
- Once the desired signal to noise ratio is achieved, stop the reaction by washing slides in buffer.

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.