Revised: February 28, 2014



# **Product Information**

# DAB Substrate Kit

Catalog Number: 30015

Unit Size: 1 kit

# **Kit Contents**

Component	Size
30015A: DAB Substrate, 20X	15 mL
30015B: Stabilized Peroxide Buffer, 20X	15 mL

## Storage and Handling

Store at 4 °C. Product is stable for at least 12 months from date of receipt when stored as recommended. Caution: DAB is a suspected carcinogen; practice universal laboratory precautions when handling kit components and dispose as hazardous waste.

## **Product Description**

DAB (3,3'-diaminobenzidine tetrahydrochloride) is a precipitating colorimetric peroxidase substrate commonly used for detection of horseradish peroxidase (HRP) conjugates in immunostaining and immunoblotting applications. DAB produces an insoluble brown reaction product in the presence of HRP. This kit provides ready-to-use stock solutions of DAB and stabilized hydrogen peroxide for convenient HRP detection.

#### **Protocol**

- Perform immunostaining or immunoblotting with HRP-conjugates according to your preferred protocol. Do not use buffers containing sodium azide. which is an inhibitor of HRP.
- Immediately before use, prepare 1X DAB staining solution in phosphate buffered saline or other buffer of your choice. To prepare 10 mL staining solution, add 0.5 mL 20X DAB substrate to 9 mL PBS and vortex to mix well. Add 0.5 mL 20X Stabilized Peroxide Buffer to the DAB/PBS mixture and vortex to mix well. Volumes may be scaled as necessary.

Note: do not use buffers containing sodium azide, which is an inhibitor of

- Add enough DAB staining solution to completely cover your sample. Incubate at room temperature for 2-20 minutes until staining is developed to the optimal degree for your application. Blots should be incubated with gentle shaking in a large enough volume of staining solution to move freely.
- Rinse sample several times with PBS to stop the development of staining. For cell or tissue samples for microscopy, counterstain the samples (optional) and mount in aqueous mounting medium such as EverBrite mounting medium. Alternatively, samples can be dehydrated and mounted in organic mounting medium. For blots, rinse with water, allow to air dry, and store at room temperature.
- Dispose of any unused 1X DAB staining solution (do not save for re-use).

#### **Related Products**

Cat.#	Product Name	Unit Size
92300	Mix-n-Stain HRP Antibody Labeling Kit, 10-20 ug labeling	1 labeling
92301	Mix-n-Stain HRP Antibody Labeling Kit, 25-50 ug labeling	1 labeling
92302	Mix-n-Stain HRP Antibody Labeling Kit, 50-100 ug labeling	1 labeling
29049	HRP Streptavidin	1 mg
20400	HRP Goat Anti-Mouse IgG (H+L)	Multiple sizes
20401	HRP Goat Anti-Mouse IgG (H+L), highly cross-adsorbed	Multiple sizes
20404	HRP Donkey Anti-Mouse IgG (H+L), highly cross-adsorbed	Multiple sizes
20402	HRP Goat Anti-Rabbit IgG (H+L)	Multiple sizes
20403	HRP Goat Anti-Rabbit IgG (H+L), highly cross-adsorbed	Multiple sizes
20405	HRP Donkey Anti-Rabbit IgG (H+L), highly cross-adsorbed	Multiple sizes
23001	EverBrite™ Mounting Medium	10 mL
23002	EverBrite™ Mounting Medium with DAPI	10 mL
23003	EverBrite™ Hardset Mounting Medium	10 mL
23004	EverBrite™ Hardset Mounting Medium with DAPI	10 mL
23005	CoverGrip™ Coverslip Sealant	15 mL
22005	Mini Super <sup>HT</sup> Pap Pen 2.5 mm tip, ~400 uses	1 pen
22006	Super HT Pap Pen 4 mm tip, ~800 uses	1 pen
22015	Fixation Buffer	100 mL
22016	Permeabilization Buffer	100 mL
22017	Permeabilization and Blocking Buffer	100 mL
22010	10% Fish Gelatin Blocking Buffer	100 mL
22011	Fish Gelatin Powder	2 x 50 g
22014	30% Bovine Serum Albumin Solution	100 mL
22012	Dry milk poweder	4 x 25 g
22002	Tween®-20	50 mL
23007	TrueBlack Lipofuscin Autofluorescence Quencher	1 mL
92176	Biotin-XX Tyramide	0.5 mg
92170	CF350 Tyramide	0.5 mg
92171	CF488A Tyramide	0.5 mg
92172	CF543 Tyramide	0.5 mg
92173	CF568 Tyramide	0.5 mg
92174	CF594 Tyramide	0.5 mg
92175	CF640R Tyramide	0.5 mg
10061	10-Acetyl-3,7-dihydroxyphenoxazine (Amplex® Red)	5 mg

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