

CE

Protein Block Serum-Free

Ready-to-use

Code X0909

Intended use

For In Vitro diagnostic use.

This blocking solution is intended for use in immunoenzymatic staining kits such as the LSAB™2, LSAB™+, EnVision™ Systems, and EnVision™+ Systems.

Summary and explanation

This product inhibits non-specific staining during the immunohistochemical (IHC) detection of antigens. It may be especially useful when staining connective tissue, epithelial tissue, adipocytes, or other types of tissues which are susceptible to high background.

Refer to Dako's *General Instructions for Immunohistochemical Staining* or the detection system instructions of IHC procedures for: 1) Principle of Procedure, 2) Materials Required, Not Supplied, 3) Storage, 4) Specimen Preparation, 5) Staining Procedure, 6) Quality Control, 7) Troubleshooting, 8) Interpretation of Staining, 9) General Limitations.

Reagent provided

Protein Block Serum-Free: 0.25% casein in PBS, containing stabilizing protein and 0.015 mol/L sodium azide.

Precautions

- 1. For professional users.
- 2. This product contains sodium azide (NaN₃), a chemical highly toxic in pure form. At product concentrations, though not classified as hazardous, sodium azide 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.
- 3. As with any product derived from biological sources, proper handling procedures should be used.
- 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.
- 6. Refer to the Material Safety Data Sheet (MSDS) for additional information.

Storage

Store at 2-8 °C. Do not freeze. Do not use after expiration date stamped on vial. If reagents are stored under any conditions other than those specified, the conditions must be verified by the user. There are no obvious signs to indicate instability of this product. Therefore, positive and negative controls should be run simultaneously with patient specimens. If unexpected staining is observed which cannot be explained by variations in laboratory procedures and a problem with the product is suspected, contact Dako Technical Support.

Performance characteristics

In the demonstration of tissue antigens by IHC , the evaluation of specific staining is frequently impeded by the presence of nonspecific (background) staining which may lead to an erroneous interpretation or false-positive results.

Typically, diffuse background staining stems from hydrophobic or ionic interactions between the primary antibody or secondary reagents and tissue components other than the target antigen. 1,2

Traditionally, interactions of link immunoglobulins with tissue proteins were decreased by application of nonimmune blocking serum before incubation with the primary antibody. 1.2 However, the blocking serum must be carefully matched to the primary antibody and link antibody to prevent cross-reactivities. 1.2

Protein Block Serum-Free does not require matching with the primary and link antibodies, is compatible with any secondary reagent system, eliminates the possibility of unanticipated cross-reactivities, and contains no potential infectious materials.

Protein Block Serum-Free utilizes casein, a hydrophilic protein which has been shown to decrease nonspecific binding of primary antibody and secondary reagents in IHC and enzyme immunoassays.²

Specimens

May be used on formalin-fixed, paraffin-embedded as well as frozen tissue sections and blood smears.

Procedure

The tissue sections are incubated with the blocking solution for 5–10 minutes at room temperature. The blocking solution is then tapped off and the slide is wiped dry around the tissue section before application of the primary antibody.

(106781-004) 301227EFG_001 p. 1/2

Limitations

Tissue staining is dependent on the handling and processing of the tissue prior to staining. Aldehyde-containing fixatives, such as formalin and glutaraldehyde frequently result in increased background staining. Improper fixation, freezing, thawing, washing, drying, heating or sectioning may produce artifacts, antibody trapping or false-negative results. False-positive staining may also be caused by cross-reactivity of other IHC staining reagents, endogenous alkaline phosphatase, endogenous peroxidase, pseudoperoxidase, endogenous avidin-binding activity, or by nonspecific reaction with necrotic or degenerated cells.

References

- 1. Key M (ed). Education Guide: Immunohistochemical Staining Methods. 4th ed. Dako 2006.
- Ramos-Vara JA. Review Article: Technical aspects of Immunohistochemistry. Vet Pathol 2005;42:405-426.

REF Catalogue number	Temperature limitation	(i)	Consult instructions for use	_	EC REP
Manufacturer	LOT Batch code		Use by	Dako North America, Inc. 6392 Via Real Carpinteria, California 93013 USA	Dako Denmark A/S Produktionsvej 42 DK-2600 Glostrup Denmark
EC REP Authorized representative in the European Community PT0039/Rev C		IVD	In vitro diagnostic medical device	Tel 805 566 6655 Fax 805 566 6688 Technical Support 800 424 0021 Customer Service 800 235 5763	Tel +45 4485 9500 Fax +45 4485 9595 www.dako.com

Edition 09/09

(106781-004) 301227EFG_001 p. 2/2