V1.1 Revised 07/06/2020

BCIP/NBT Substrate

A one-component formulation suitable for membrane assays using AP.

BCIP/NBT Substrate is suitable for membrane applications using alkaline phosphatase (AP) as the conjugated detection enzyme. BCIP/NBT Substrate should not be used for microwell (ELISA) applications.

BCIP/NBT Substrate is a one-component formulation containing 5-bromo-4-chloro-3-indolyl-phosphate (BCIP) and nitroblue tetrazolium (NBT) substrate. BCIP/NBT Substrate reacts with alkaline phosphatase to yield an insoluble, dark blue reaction product. BCIP/NBT Substrate is supplied ready-to-use at 1X.

Allow BCIP/NBT Substrate to equilibrate to room temperature (25°C) prior to use. After probing with the antibody and AP reagents, wash membrane thoroughly and transfer the membrane into a clean container. Cover the membrane surface with ample amount of BCIP/NBT Substrate and incubate. The substrate will react with sites on the membrane containing alkaline phosphatase, producing an insoluble, permanent, dark blue reaction product.

For best results, monitor the substrate color development process until the target protein bands are visible. To stop the reaction, rinse the membrane with reagent quality water. If the reaction proceeds too long, there will be excessive background staining and diminished resolution of the target peptide or protein banding regions. If the color development is too rapid or intense, it is recommended to dilute the antibodies or conjugates or shorten the incubation period.

BCIP/NBT SUBSTRATE

Size Catalog# 100 mL LS-M41-100

INSTRUCTIONS:

- 1. Perform electro-blotting procedure.
- 2. Block membranes 4 hours-overnight.
- 3. Probe membranes with antibodies and AP conjugate.
- 4. Wash membranes after each antibody incubation step. Always transfer to a clean container for substrate development step.
- 5. Bring BCIP/NBT Substrate to room temperature; protect it from light.
- 6. Add BCIP/NBT Substrate to cover the membrane surface.
- 7. Incubate BCIP/NBT Substrate at room temperature for several minutes.
- 8. Monitor the substrate color development to visualize the target peptide and protein bands.
- Stop the color development reaction by transferring the membrane to diH₂O. Change the solution several times to ensure complete removal of all soluble BCIP/NBT components.
- 10. Analyze the data.

For more information and protocols, please visit www.LSBio.com.

SPECIFICATIONS:

- Colorless to very light yellow liquid
- 1X ready to use

STORAGE:

- 2-25°C
- · Protect from light

SAFETY & USAGE:

- SDS available upon request
- Not for human or drug use
- For research use only



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