

Product Information

BCIP®/NBT-Blue Liquid Substrate System for Membranes

Alkaline phosphatase substrate

B3804

Product Description

Storage temperature: 2-8 °C

5-bromo-4-chloro-3-indolyl phosphate (BCIP®) and nitro blue tetrazolium (NBT) are reagents that are widely used in tandem to detect alkaline phosphatase conjugates.¹⁻³

This BCIP®/NBT-Purple Liquid Substrate System for Membranes product is supplied as a ready-to-use buffered alkaline phosphatase substrate that contains both BCIP® and NBT. Prior to reaction with alkaline phosphatase, the substrate should appear as a colorless to light yellow solution. It will develop a permanent dark blue-purple reaction product when reacted with alkaline phosphatase on membrane applications (such as blotting).

Because this substrate produces an insoluble reaction product, this product **is not recommended** for multiwell applications (such as ELISA) or for immunohistochemical applications. Several publications,⁴⁻¹⁷ theses,¹⁸ and dissertations¹⁹⁻²¹ have cited use of product B3804 in their protocols.

Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

The product is a ready-to-use, one component substrate for alkaline phosphatase and is supplied at the working dilution.

Storage/Stability

Store the product at 2-8 °C. This substrate is light-sensitive and should be protected from direct sunlight or UV sources.

Usage

- The product should be brought to room temperature (~25 °C) before use.
- Use enough substrate solution to cover completely the membrane surface.
- Upon incubation, a dark blue-purple reaction product will develop on membrane sites where alkaline phosphatase is present.
- The reaction should be monitored continuously and read before the background color becomes too intense, which will result in diminished contrast between positive and background staining.
- Stop the reaction by rinsing briefly with water.
- **Dilution of the substrate product is not recommended.** To reduce the intensity of a reaction, it is recommended that the antibodies or conjugates be diluted instead.

References

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B3804dat Rev 08/22 RBG,ALC,GCY,MAM

