CDP-Star^O Chemiluminescent **Phosphatase Substrate**

Ready to use

Catalog No. Size 50-60-05 100 ml



DESCRIPTION

CDP-Star is a chemiluminescent substrate for detection of alkaline phosphatase conjugates in membrane applications. The substrate will immediately begin to emit light upon mixing with alkaline phosphatase with peak light emission occurring after 2-4 hours and continuing for several days. Applications include Northern, Southern, and Western blotting.

STORAGE/STABILITY

Store at 2-8°C. Stable for 1 year from date of receipt when stored at 2-8°C. Avoid prolonged exposure to light.

USE

- For nucleic acid detection, positively charged nylon membrane is recommended. For western blotting, PVDF membrane is recommended.
- For optimal performance, it is strongly recommended that KPL's Phosphatase Wash Solution and Phosphatase Assay Buffer (See RELATED PRODUCTS) be used in conjunction with procedures using CDP-Star.

Detection Procedure

- 1. Perform electrophoresis and transfer using standard protocols.
- Following incubation with alkaline phosphatase labeled streptavidin or antibody conjugate, be sure to thoroughly wash the membrane using Phosphatase Wash Solution (See RELATED PRODUCTS) or other appropriate wash solution.
- 3. Rinse membrane in Phosphatase Assay Buffer (See RELATED PRODUCTS) prior to adding CDP-Star.
- 4. Incubate membrane in CDP-Star for 5 minutes using 5 ml substrate per 100 cm² of membrane.
- Remove membrane from substrate, touch the edge to a
 piece of filter paper to remove excess substrate and place
 membrane in a hybridization bag or between two sheets of
 clear plastic.
- 6. **NOTE:** Prior to exposure, excess substrate must be completely removed or the ends of the plastic sheet sealed to prevent leakage onto the film.
- 7. Expose membrane to X-ray film for 5-10 minutes at room temperature. The signal obtained from the first exposure will determine optimal exposure time for high signal with low background.

TROUBLESHOOTING

Problem	Cause	Corrective Action
Spotty	Leakage of CDP-Star	Touch membrane to
background	onto the X-ray film.	filter paper to remove
		excess substrate.
High background	Film exposure time	Decrease length of film
	too long.	exposure.
	Insufficient washing.	Increase volume of wash solution and/or time of washes.
	AP conjugate too	Increase AP conjugate
	concentrated.	dilution; use less
		conjugate.
Weak Signal	Film exposure time	Obtain a longer film
	too brief.	exposure.
	AP conjugate too dilute.	Decrease AP conjugate dilution; use more conjugate.

PRODUCT SAFETY AND HANDLING

This product is considered non-hazardous as defined by The Hazard Communication Standard (29 CFR 1910.1200). Avoid contact with skin and eyes. In case of contact or spillage, clean with copious amounts of water. Product may be disposed via sanitary sewer.

RELATED PRODUCTS

AP Streptavidin	Cat. No. 475-3000
Phosphatase Wash Solution (5X)	Cat. No. 50-63-15
Phosphatase Assay Buffer (10X)	Cat. No. 50-63-14
Detector Block	Cat. No. 71-83-00
RNADetector Northern Kit	Cat. No. 54-30-01
DNADetector Genomic Southern Kit	Cat. No. 54-30-03

See KPL's catalog for a complete list of nucleic acid labeling and detection systems, antibodies and substrates.

The product listed herein is for research use only and is not intended for use in human or clinical diagnosis. Nothing disclosed herein is to be construed as a recommendation to use this product in violation of any patients. However, said information and product are offered without warranty or guarantee since the ultimate conditions of use and the variability of the materials treated are beyond our control. We cannot be responsible for patent infringements or other violations that may occur

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with the use of this product. No claims beyond replacement of unacceptable material or refund of purchase price shall be allowed.

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