DyLight™ 405 - Labeled Streptavidin

Catalog No.	Size
072-08-30-00	1.0 mg
042-08-30-00	0.1 mg

DESCRIPTION

Streptavidin is a 60,000 Dalton protein isolated from the bacterium *Streptomyces avidinii*. The use of streptavidin, rather than egg white avidin, as the bridging reagent ensures that these products demonstrate high sensitivity and specificity, and low background. Streptavidin has been shown to bind four molecules of biotin with high affinity ($K_a = 10^{15}M^{-1}$). Electrophoretically pure streptavidin was labeled with DyLight™ 405 using a proprietary method. DyLight conjugates provide increased brightness and greater photostability than other fluorophores. This conjugate is designed for use in immunofluorescense assays, including flow cytometry, immunohistology, Western blotting, microarrays and FLISA.

FORM/STORAGE

Lyophilized. Store at 2-8°C until rehydrated. Stable for a minimum of 1 year when stored at 2-8°C.

STABILIZER

IgG free bovine serum albumin (BSA) is added as a protein stabilizer. Non-sterile.

PROTEIN CONCENTRATION

The quantity of the streptavidin conjugate is 1.0 mg or 0.1 mg as determined by UV absorbance at 280 nm. Upon rehydration with water, the solution will contain 1% BSA, 100 mM phosphate, 150 mM sodium chloride, 0.02% sodium azide, pH 7.4. The conjugate will be at a concentration of 1.0 mg/mL.

F/P RATIO

Molar fluorophore/protein ratio is from 2:1 – 5:1.

EXCITATION/EMISSION VALUES

DyLight 405 is excited at 400 nm (in PBS) and emits at 420 nm (in PBS).

REHYDRATION AND STORAGE

Note: Rehydration in buffers other than those listed here is not recommended.

Rehydration: Rehydrate with 1 mL of reagent quality water for the 1.0 mg size, or with 0.1 mL of reagent quality water for the 0.1 mg size. Rotate the vial until the lyophilized pellet is totally dissolved.

Use: Prior to use, dilute to the desired concentration with PBS or 1% BSA Diluent/Blocking Solution. The diluted conjugate should be used immediately.

Storage: The rehydrated product is stable for a minimum of 1 year at 2-8°C.

SUGGESTED WORKING DILUTIONS

Optimal working concentrations should be determined experimentally. Prepare working dilutions in PBS or other buffer such as BSA Diluent/Blocking Solution (See RELATED PRODUCTS). Dilution is not recommended for long-term storage. Suggested dilutions are listed below. In many cases, the antibody may be diluted further than indicated:

Microwell:	
1:100 - 1:250	10 µg/mL – 4 µg/mL
Blotting:	
1:7500 – 1:15,000	0.13 µg/mL – 66.6 ng/mL
Histo/Cytochemical/Flow Cytometry:	
1:100 – 1:1000	10 µg/mL – 1 µg/mL

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. Dispose of via institutional guidelines.

TRADEMARKS

DyLight™ is a trademark of Thermo Fisher Scientific Inc. and its subsidiaries.

RELATED PRODUCTS

BSA Diluent/Blocking Solution	Cat. No. 50-61-00
	Cat. No. 50-61-10
Coating Solution	Cat. No. 50-84-00
Wash Solution	Cat. No. 50-63-00
	Cat. No. 50-63-04
Fluorescent Mounting Medium	Cat. No. 71-00-06
10X PBS	Cat. No. 51-13-01
	Cat. No. 51-13-02

See the KPL catalog for a wide selection of antibodies, substrates, protein and nucleic acid detection kits, and immunohistochemistry reagents.

Gaithersburg, MD, USA
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