

Qty: 1 mg/1 ml

ZyMAX™
Streptavidin-Cy™5 Conjugate
For Research Use Only



Cy™5-Streptavidin Conjugate (ZyMAX™ Grade)

Catalog No. 43-8316

Lot No. See product label

For Research Use Only. Not for use in diagnostic procedures.

FORM

ZyMAX™ Streptavidin-Cy™5 is supplied as 1 ml of liquid at 1 mg/ml in a proprietary conjugate stabilizing buffer containing 0.1% sodium azide as a preservative. In the preparation of this product, Invitrogen uses highly purified streptavidin and Cy™5.

BACKGROUND

Streptavidin (MW=66 kDa) binds specifically with biotin (244 Da). It is derived from the bacterium *Streptomyces avidinii* and bears a remarkable similarity to chicken egg-white avidin both in three-dimensional structure and its ability to bind biotin with extremely high affinity ($K_d=10^{-15}M$). It is a tetrameric protein capable of binding up to 4 biotin molecules. Unlike avidin, Streptavidin is non-glycosylated and is essentially neutral in charge, whereas avidin ($pI\approx 10.5$) is basic at neutral pH. Because of this, streptavidin has considerably less non-specific binding resulting in less background. It has replaced avidin as the reagent of choice for most applications where protein interactions may cause background. Under conditions where background is extremely problematic, investigators should consider using Z-Avidin, a modified form of avidin that may exhibit even greater sensitivity in tissue staining and flow cytometry--see Related Products, below.

USAGE

ZyMAX™ grade reagents offer enhanced assay sensitivity, higher titers, and greater flexibility in assay design, than standard grade reagents. Invitrogen's Streptavidin- Cy™5 is recommended for use in detection systems utilizing biotinylated antibodies, and other biotinylated molecules.

Working concentrations for specific applications should be determined by the investigator. Appropriate dilutions will be affected by several factors, including primary and secondary antibody affinity, antigen concentration and length of incubations. We recommend the following ranges as starting points.

Immunofluorescence: 1:20 to 1:50
Flow Cytometry: 1:50 to 1:200

PROCEDURES

Invitrogen has general guidelines for ELISA, blotting and other applications available on our Web site at www.invitrogen.com/content.cfm?pageid=10678. You may also obtain assistance from our Technical Service department at (800) 955-6288. Another good source of information about general immunoassay procedures is Ed Harlow & David Lane's Antibodies, A Laboratory Manual, Cold Spring Harbor Laboratory (1988). Also see Bayer and Wilchek (referenced above).

STORAGE

Store at 2-8°C.(43-8316 continued)

RELATED PRODUCTS

Product Cat. No.

Goat anti-Mouse IgG (H+L)-Biotin (ZyMAX™ Grade)	81-6540
Goat anti Rabbit IgG (H+L)-Biotin (ZyMAX™ Grade)	81-6140
Rabbit anti-Goat IgG (H+L)-Biotin (ZyMAX™ Grade)	81-1640
Goat anti-Human IgG (H+L)-Biotin (ZyMAX™ Grade)	81-7140
Goat anti-Rat IgG (H+L)-Biotin	62-9540
pNPP Single Solution (chromogen for ELISA)	00-2212 (100 ml), 00-2213 (500 ml)
BCIP/NBT Reagent Kit (chromagen for immunoblotting)	00-2210
BCIP/NBT Liquid Reagent Kit (chromogen for IHC, blotting)	00-2211 (IHC), 00-2209 (blot)
AP-Fast Red Reagent (chromagen for IHC)	00-2234
AP-Blue Reagent Kit (chromogen for IHC)	00-2204

TRADEMARKS

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