

# Streptavidin (S10D4): sc-52234

## BACKGROUND

Streptavidin is a tetrameric protein purified from *Streptomyces avidinii* that binds very tightly to the vitamin Biotin with one of the strongest known biological and noncovalent interactions. Each monomer of Streptavidin binds one molecule of Biotin. The strong Streptavidin-Biotin bond can be used to "glue" various chemicals onto surfaces and to link together molecules such as radioisotopes and monoclonal antibodies. Streptavidin is widely utilized in scientific laboratories, commonly for the purification of immunochemistries. It is one of the most important components in diagnostics and laboratory kits.

## REFERENCES

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3. Sorensen, H.P., et al. 2003. A favorable solubility partner for the recombinant expression of Streptavidin. *Protein Expr. Purif.* 32: 252-259.
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9. Palmowski, M., et al. 2008. Pharmacodynamics of Streptavidin-coated cyanoacrylate microbubbles designed for molecular ultrasound imaging. *Invest. Radiol.* 43: 162-169.

## SOURCE

Streptavidin (S10D4) is a mouse monoclonal antibody raised against Streptavidin of *Streptomyces avidinii* origin.

## PRODUCT

Each vial contains 100 µg IgG<sub>1</sub> in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

Streptavidin (S10D4) is recommended for detection of Streptavidin of *Streptomyces avidinii* origin by Western Blotting (starting dilution to be determined by researcher, dilution range 1:10-1:100), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10<sup>6</sup> cells); permits the formation of antibody-Streptavidin complexes, thus enhancing the sensitivity of the detection system.

Molecular Weight of Streptavidin: 24 kDa.

## SELECT PRODUCT CITATIONS

1. Boncompain, G., et al. 2012. Synchronization of secretory protein traffic in populations of cells. *Nat. Methods* 9: 493-498.
2. Bojang, P., et al. 2014. *De novo* LINE-1 retrotransposition in Hep G2 cells preferentially targets gene poor regions of chromosome 13. *Genomics* 104: 96-104.
3. Boncompain, G. and Perez, F. 2014. Synchronization of secretory cargos trafficking in populations of cells. *Methods Mol. Biol.* 1174: 211-223.
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## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.