
Product Data Sheet

Product Name: Streptavidin and Conjugates

Cat. No.: GD20842

Chemical Properties

Cas. No. 9013-20-1

Formula C₁₂H₂₄O₁₂ M.Wt 0

Solubility Storage -20°C argon filling

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure

Background

Streptavidin is a ~60 kDa homotetramer. Streptavidin binds four molecules of biotin with the highest affinity. The binding affinity of biotin to streptavidin is one of the highest reported for a non-covalent interaction to date, with a $K_D \sim 0.01$ pM. Streptavidin has an immunosuppressive role.

Streptavidin (2-200 µg/mL) significantly suppresses the proliferation of Lewis T cells to WF by 76%-83% compared with untreated responders^[1].

Streptavidin (8-80 mg/kg) treatment is effective in prolonging rat cardiac allografts in the high-responder WF-to-Lewis combination^[2].

[1]. Keleabetswe L. Mpye , et al. The effects of temperature on streptavidin-biotin binding using affinity isothermal titration calorimetry. AIMS Biophysics. 2020, 7(4): 236-247.

[2]. P Witkowski, et al. Effect of streptavidin on cardiac allograft prolongation is due to host T-Cell suppression. Transplant Proc. Jan-Feb 2005;37(1):116-8.

Caution: Product has not been fully validated for medical applications. For research use only.

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