ScienCell™ Research Laboratories

Recombinant Streptavidin (rStreptavidin)
Catalog Number: 1005-01

Description	Streptavidin is a tetrameric protein composed of identical subunits. Each subunit binds one biotin molecule with a KD of ~1×10^{-15} M. The preparation contains an N- and C-terminal shortened variant (core streptavidin) with improved properties concerning homogeneity, solubility, resistance towards proteolytic degradation and accessibility of the biotin binding pocket as compared to native streptavidin.
Source	Recombinant streptavidin from *Streptomyces avidinii*, produced in *Escherichia coli*.
Molecular Weight	53 kDa (per tetramer)
Purity	>95% by SDS-PAGE analyses.
Proteolytic Activity	< 10^{-3} U/mg protein (Azocoll, 25 °C, 24 h, pH 8.0)
Specific Activity	> 17 units/ mg (1 unit binds 1µg D-biotin at pH 8.9)
Extinction coefficient per subunit	ε_{280} = 41326 M^{-1} cm^{-1}
Physical Appearance	White lyophilized powder.
Formulation	Lyophilized in 10 mM potassium phosphate buffer pH 6.5
Reconstitution	Reconstitute in sterile distilled water or saline.
Storage	Store at -20°C after receiving. Upon reconstitution, store at 2-8°C for up to one week. For maximal stability, aliquot and store at -20°C. Avoid repeated freeze/ thaw cycles.
Usage	This product is for research use only. It is not approved for use in humans, animals, or *in vitro* diagnostic procedures.