

Recombinant Streptavidin (rStreptavidin)

ChemWhat Technical Data Sheet (TDS)

Catalog Number:	1005-01
Source:	Recombinant streptavidin from <i>Streptomyces avidinii</i> , produced in <i>Escherichia coli</i> .
Molecular Weight:	~52,000 per tetramer.
Quantity:	1mg/5mg/1g
AA Sequence:	MAEAGITGTW YNQLGSTFIV TAGADGALTG TYESAVGNAE SRYVLTGRYD SAPATDGSST ALGWTVAWKN NYRNAHSATT WSGQYVGGAE ARINTQWLLT SGTTEANAWK STLVGHDFTFT KVKPSAAS
A₂₈₂ of 0.1% solution:	3.1
Purity:	> 98 % by SDS-PAGE and HPLC analyses
Specific Activity:	> 17 U/mg (one unit binds 1 µg D-biotin)
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized in 10 mM potassium phosphate buffer pH 6.5.
Endotoxin:	Less than 0.1 EU/µg of rStreptavidin as determined by LAL method.
Proteolytic Activity:	< 10 ⁻³ U/mg protein (Azocoll, 25 °C, 24 h, pH 8.0)
Reconstitution:	Dissolve with double distilled water
Solubility:	Clearly soluble in ddH ₂ O (OD _{405nm} < 0.1 at 10 mg/ml water)
Stability & Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">● Refer to lot specific COA for the Use by Date when stored at ≤ -20 °C as supplied.● 1 month, 2 to 8 °C under sterile conditions after reconstitution.● 3 months, -20 to -70 °C under sterile conditions after reconstitution.
Shipment:	At ambient temperature
Usage:	ChemWhat Limited in UK offers this branded product for research, development or further evaluation purposes. NOT FOR HUMAN USE.

Streptavidin

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.