

Streptavidin, 37-159aa, Streptomyces, His tag, E.coli

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3th Edition

Synonyms:Streptavidin, STAV

Description:Streptavidin, a tetrameric protein secreted by Streptomyces avidinii, binds tightly to a small growth factor biotin. It finds wide use in molecular biology through its extraordinarily strong affinity for the vitamin biotin; the dissociation constant (Kd) of the biotin-streptavidin complex is on the order of ~10-15 mol/L. The high affinity recognition of biotin and biotinylated molecules has made streptavidin one of the most important components in diagnostics and laboratory kits. Recombinant Streptomyces streptavidin protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

Form:Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 0.15M NaCl, 20% glycerol

Molecular Weight:15.6kDa (148aa), confirmed by MALDI-TOF

Sequences:

MGSSHHHHHSSGLVPRGSHMGSHMAEAGITGTWYNQLGSTFIVTAGADGALTGTYESAVGNAESRYVLTGRYD
SAPATDGSGTALGWTVAWKNNYRNAHSATTWSGQYVGGAEARINTQWLLTSGTTEANAWKSTLVGHDTFTKVKP

Purity:> 95% by HPLC

Concentration:0.25 mg/ml (determined by BCA assay)

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.