



Streptavidin [FITC] (DAG4456)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Streptavidin, FITC-conjugated
Specificity	Ficoll prepared human peripheral blood lymphocytes, CEM, HPB-MLT, Nalm-6, Jurkat, U-937, Molt-4, Raji, Daudi and KG-1 (cells expressing Fc receptors were pre-blocked with human IgG).
Nature	Synthetic
Expression System	N/A
Species	N/A
Purity	Purified streptavidin was covalently conjugated to FITC and the conjugate isolated by size exclusion chromatography. with a FITC to protein molar ratio of 9.0.
Conjugate	FITC
Applications	Flow Cytometry; Immunohistochemistry; ELISA
Recommended Usage	Streptavidin can be used in conjunction with biotinylated antibodies as an avidin/biotin labeling system for flow cytometry.
Procedure	None
Format	Liquid
Concentration	100 µg/mL
Size	120 tests
Buffer	50 mM Sodium Phosphate pH 7.5, 100 mM Potassium Chloride, 150 mM NaCl, 5% Glycerol, 0.2% BSA, 0.04% NaN ₃ (as a preservative).
Preservative	0.04% Sodium Azide

Storage	Store at 2 - 5°C. Do not freeze! Protect from light. Product should retain activity for at least 12 months after shipping date when stored as recommended.
Warnings	PLEASE note that this product is intended for research use only; not for diagnostic or clinical use.

BACKGROUND

Introduction	<p>Streptavidin is a 52.8 kDa protein purified from the bacterium <i>Streptomyces avidinii</i>. Streptavidin homo-tetramers have an extraordinarily high affinity for biotin (also known as vitamin B7 or vitamin H). With a dissociation constant (Kd) on the order of $\approx 10^{-14}$ mol/L, the binding of biotin to streptavidin is one of the strongest non-covalent interactions known in nature. Streptavidin is used extensively in molecular biology and bionanotechnology due to the streptavidin-biotin complex's resistance to organic solvents, denaturants (e.g. guanidinium chloride), detergents (e.g. SDS, Triton), proteolytic enzymes, and extremes of temperature and pH.</p>
Keywords	Streptavidin