



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).
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.
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% NaN3 (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.

BACKGROUND

Introduction

Streptavidin is a 52.8 kDa protein purified from the bacterium *Streptomyces avidinii*. 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.

Keywords

Streptavidin