

Product datasheet for **RA021APC**

Streptavidin Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Streptavidin protein, 100 Tests
Concentration:	lot specific
Conjugation:	APC
Buffer:	State: Lyophilized Streptavidin conjugated to Allophycocyanin (APC) Buffer System: PBS, pH 7.2 containing 0.09% Sodium Azide as preservative and 1% BSA and 5% sucrose as stabilizers. Presentation Label: APC
Reconstitution Method:	Restore with 1ml distilled water
Preparation:	Lyophilized Streptavidin conjugated to Allophycocyanin (APC)
Applications:	Flow Cytometry: Use 10 µl of Neat antibody to label 10e6 cells in 100 µl. RA021APC is designed as a secondary reagent for use in Flow Cytometry in conjunction with biotinylated primary antibodies. RA021APC conjugates show negligible non-specific binding to non-biotinylated macromolecules, and therefore gives very low backgrounds.
Protein Description:	Preparation: Pure Streptavidin is reacted with Succinimidyl 4- (N-maleimido-methyl) cyclohexane-1-carboxylate (SMCC). Allophycocyanin is reacted with N-succinimidyl 3-(2-pyridyldithio) propionate (SPDP) and activated by reduction with dithiothreitol. The two substituted proteins are reacted together to give covalent conjugates, which are selected by medium pressure liquid chromatography on gel filtration columns of AcA34 ultrogel.
Storage:	Store the product undiluted before and after reconstitution at 2-8°C. DO NOT FREEZE! This product is photosensitive and should be protected from light.
Stability:	Shelf life: One year from despatch.
Synonyms:	StAv



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Summary:

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 (K_d) of the biotin-streptavidin complex is on the order of $\sim 10^{-15}$ 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.

Protein Families:

Flow Cytometry: Use 10 μ l of Neat antibody to label 10^6 cells in 100 μ l.
RA021APC is designed as a secondary reagent for use in Flow Cytometry in conjunction with biotinylated primary antibodies.
RA021APC conjugates show negligible non-specific binding to non-biotinylated macromolecules, and therefore gives very low backgrounds.