

ReadiUse™ Preactivated Streptavidin Azide

Catalog Number: 16883

Unit Size: 1 mg

Product Details

Storage Conditions	Freeze (< -15 °C), Minimize light exposure
Expiration Date	24 months upon receiving

Chemical Properties

Appearance	Solid
Molecular Weight	N/A
Soluble In	Water

Spectral Properties

Excitation Wavelength	N/A
Emission Wavelength	N/A

Applications

ReadiUse™ Preactivated Streptavidin Azide is an excellent alkyne-reactive building block that can be used for developing bioconjugates via the well-known click chemistry. It readily reacts with conventional alkynes, DBCO and the FastClick™ alkynes. Streptavidin is a biotin-binding protein found in the culture broth of the bacterium *Streptomyces avidinii*. Streptavidin binds 4 moles of biotin per mole of protein with a high affinity virtually unmatched in nature. Streptavidin lacks carbohydrate side chains present on avidin and has an isoelectric point nearer to neutrality where most useful biological interactions occur (pI of 5-6 vs 10 for avidin). As a result, streptavidin frequently exhibits lower levels of non-specific binding than does avidin when the proteins are used in applications relying upon the formation of avidin/biotin complexes. Streptavidin finds utility in a variety of biological systems because antibody molecules are easily modified by the covalent attachment of derivatives of biotin with little or no loss in the ability of the antibody molecules to bind their antigens. These biotinylated antibodies may be detected by their interaction with conjugates of streptavidin and the reporter enzymes. The same preparation of conjugated streptavidin reporter enzyme may be used with any number of different biotinylated antibodies making this system a highly flexible one. The reporter molecule may be bound to streptavidin covalently, or biotinylated and attached to streptavidin via the streptavidin-biotin interaction.