

## ReadiUse™ Preactivated Streptavidin Maleimide

Catalog Number: 16887

Unit Size: 1 mg

### Product Details

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

### Chemical Properties

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Appearance	Solid off-white
Molecular Weight	~55 kDa
Soluble In	Water

### Spectral Properties

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Excitation Wavelength	N/A
Emission Wavelength	N/A

### Applications

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ReadiUse™ Preactivated Streptavidin Maleimide is an excellent thiol-reactive building block that can be readily conjugated to thiol-containing biomolecules such as antibodies, peptides and thiol-modified oligos. It reacts with these thiol compounds under extremely mild conditions. 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.