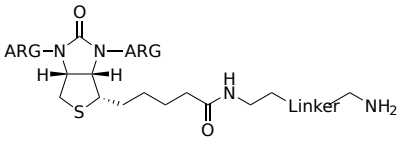
ReadiLeave™ Reversible Biotin Amine

Catalog Number: 3405
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	588.68
Soluble In	DMSO
Chemical Structure	

ARG = **A**ffinity **R**educing **G**roup

Spectral Properties

Excitation Wavelength	N/A
Emission Wavelength	N/A

Applications

ReadiLeave™ Reversible (RLR) Biotin is a newly developed biotin derivative that has significantly reduced affinity to avidin (including streptavidin) to make the binding of RLR biotin and streptavidin readily reversible when needed. It is complimentary to the regular biotin and has a moderate affinity to streptavidin to ensure a tight binding but not too tight to be reversed in contrast with the regular non-reversible biotin. ReadiLeave™ Reversible Biotin Amine is an excellent building block to develop reversible biotin probes and products for biological detections and purification using the well-known click reactions (CuAAC). It readily reacts with a carbonyl-containing biomolecule under various conditions. The affinity between streptavidin and biotin might be the strongest non-covalent interactions known in biological interactions. Streptavidin, a homotetrameric protein, exhibits an extraordinarily high affinity for biotin. Each streptavidin monomer can bind one biotin molecule, allowing a streptavidin protein to maximally bind four biotins. The streptavidin-biotin interaction is highly specific and remains robust under a wide range of conditions.