

Biotin cadaverine

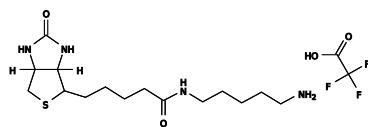
Catalog Number: 3004

Unit Size: 25 mg

Product Details

Storage Conditions	Freeze (< -15 °C)
Expiration Date	12 months upon receiving

Chemical Properties

Appearance	Solid off-white
Molecular Weight	442.50
Soluble In	DMSO
Chemical Structure	 The chemical structure shows a biotin molecule (a thiazolidine ring fused to an imidazole ring) attached to a long-chain fatty acid. The chain consists of 16 carbons, with a terminal amine group (NH2) and a carboxylic acid group (COOH) at the opposite end. The carboxylic acid group is further substituted with a hydroxyl group (OH) and two fluorine atoms (F).

Spectral Properties

Excitation Wavelength	N/A
Emission Wavelength	N/A

Applications

Biotin and biotin derivatives bind with high affinity to both avidins and streptavidins. Biotin and its derivatives can be conjugated to many biomolecules without significantly altering the biological activity of the target molecules since biotin is relatively a small molecule. A biopolymer (such as proteins) can react with several molecules of biotin that, in turn, can each bind one avidin. This characteristic greatly increases the sensitivity of many biological assays. Biotin derivatives are widely used for biological detections and purification. This biotin derivative is carbonyl-reactive. It is used for colorimetric assays for Factor XII (when used with EDC) and cellular transglutaminase. It is also widely used for labeling peptides (carboxylic acid groups) and nucleotides (5' phosphate groups) via the use of EDC.