

Medetomidine biotin conjugate

Catalog Number: 50654

Unit Size: 1 mg

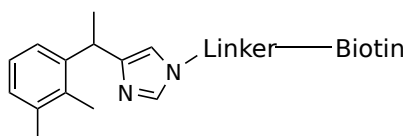
Product Details

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

Chemical Properties

Appearance	Solid
Molecular Weight	N/A
Soluble In	DMSO

Chemical Structure



Spectral Properties

Excitation Wavelength	N/A
Emission Wavelength	N/A

Applications

Medetomidine biotin conjugate is a chemically modified derivative of medetomidine, an α_2 -adrenergic receptor agonist, functionalized with a biotin moiety to enable affinity-based detection and capture. This conjugate retains the high binding affinity and pharmacological specificity of native medetomidine toward α_2 -adrenergic receptors while incorporating a biotin tag for interaction with avidin- or streptavidin-based systems. The design preserves receptor-binding activity through a strategically positioned linker, minimizing steric hindrance and maintaining functional integrity of both the ligand and biotin. This reagent is particularly well-suited for applications such as receptor-ligand binding assays, target validation, affinity chromatography, and imaging studies, where precise receptor targeting and robust signal amplification are required. Medetomidine biotin conjugate is compatible with a range of in vitro and ex vivo experimental platforms and is an effective tool for dissecting adrenergic receptor function and pharmacodynamics in neurobiology and signal transduction research.