

Medetomidine NHS Ester

Catalog Number: 50650

Unit Size: 1 mg

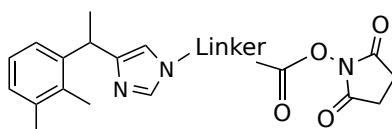
Product Details

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

Chemical Properties

Appearance	Solid
Molecular Weight	411.50
Soluble In	DMSO

Chemical Structure



Spectral Properties

Excitation Wavelength	N/A
Emission Wavelength	N/A

Applications

Medetomidine NHS Ester is an amine-reactive derivative of medetomidine, a potent alpha-2 adrenergic receptor agonist. This compound incorporates an N-hydroxysuccinimide (NHS) ester group, enabling efficient and selective conjugation to primary amines under mild, aqueous conditions (typically pH 7.2–8.5). The resulting amide bond is stable, making this reagent well-suited for covalently attaching medetomidine to peptides, proteins, or other biomolecules. Medetomidine NHS Ester retains the pharmacological activity of the parent compound, allowing it to be used in targeted drug delivery, receptor-ligand interaction studies, and biosensor development. Its versatility also makes it valuable for functionalizing surfaces or creating tracer-labeled conjugates for imaging and detection purposes. This reagent is particularly useful in applications where site-specific coupling and receptor targeting are required.