

Diazepam maleimide

Catalog Number: 50661

Unit Size: 1 mg

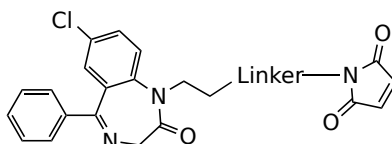
Product Details

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

Chemical Properties

Appearance	Solid
Molecular Weight	506.99
Soluble In	DMSO

Chemical Structure



Spectral Properties

Excitation Wavelength	N/A
Emission Wavelength	N/A

Applications

Diazepam maleimide is a thiol-reactive diazepam analog engineered for site-specific conjugation to sulfhydryl-containing biomolecules. It features a maleimide group that selectively reacts with free thiols via Michael addition under mild, aqueous conditions, forming stable thioether bonds. This selective reactivity enables precise and efficient labeling of cysteine residues in proteins, peptides, and other thiolated species. Critically, the diazepam scaffold remains pharmacologically active, preserving its high affinity for GABA_A receptors. As such, diazepam maleimide is well-suited for applications in neuropharmacological research, receptor-binding studies, and structure-activity relationship (SAR) investigations. Additionally, it supports the development of targeted drug conjugates, functional bioconjugates, and thiol-reactive ligands for surface immobilization in biosensing or affinity capture platforms.