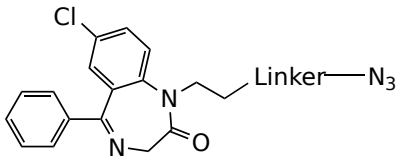
Diazepam azide

Catalog Number: 50662
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	452.94
Soluble In	DMSO
Chemical Structure	

Spectral Properties

Excitation Wavelength	N/A
Emission Wavelength	N/A

Applications

Diazepam azide is an azide-functionalized analog of diazepam designed for site-specific conjugation using bioorthogonal click chemistry, including copper-catalyzed azide–alkyne cycloaddition (CuAAC) and strain-promoted azide–alkyne cycloaddition (SPAAC). The presence of the azide group allows for efficient and selective labeling while maintaining the pharmacologically active benzodiazepine scaffold that interacts with $GABA_A$ receptors. This compound is well suited for applications in neuropharmacology and chemical biology, enabling covalent attachment to alkyne-containing fluorophores, affinity probes, or drug delivery systems. Diazepam azide supports real-time imaging, receptor binding studies, and mechanistic investigations by combining biological functionality with chemical reactivity. Its structural design minimizes steric hindrance around the reactive site, ensuring compatibility with conjugation strategies and retention of native receptor interactions. This reagent offers a flexible platform for exploring benzodiazepine receptor activity, visualizing ligand localization, and developing conjugate-based research tools.