

Diazepam HRP Conjugate

Catalog Number: 50667

Unit Size: 1 mg

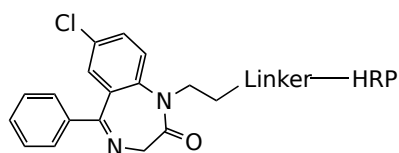
Product Details

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

Diazepam HRP is a well-characterized conjugate consisting of diazepam covalently linked to horseradish peroxidase (HRP), designed for use as a tracer in competitive enzyme-linked immunosorbent assays (ELISAs) and related immunodetection platforms. The conjugate enables sensitive and specific quantification of diazepam and structurally related benzodiazepines in complex biological matrices, including plasma, serum, and urine. The HRP enzyme catalyzes the oxidation of chromogenic (e.g., TMB, ABTS), fluorogenic, or chemiluminescent (e.g., luminol-based) substrates, facilitating signal amplification and improving assay detection limits. In competitive assay formats, Diazepam HRP competes with free diazepam for binding to immobilized anti-diazepam antibodies, with signal intensity inversely proportional to the concentration of free analyte. Diazepam HRP is suitable for a wide range of applications in clinical toxicology, forensic analysis, therapeutic drug monitoring, and pharmacological research.