

Rhod-4™ maleimide

Catalog Number: 21127

Unit Size: 100 ug

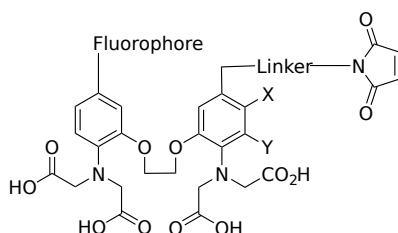
Product Details

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

Chemical Properties

Appearance	Solid
Molecular Weight	893.86
Soluble In	DMSO

Chemical Structure



Spectral Properties

Excitation Wavelength	523 nm
Emission Wavelength	551 nm

Applications

Rhod-4™ maleimide is an excellent building block that can be readily used to prepare a calcium-sensitive bioconjugate for monitoring calcium change spatially for a specific target. It can be selectively conjugated to thiol-containing biomolecules such as antibodies, thiol-modified oligos, or peptides containing a cysteine residue. Rhod-4™ is a fluorescent calcium indicator dye commonly used in cell biology and neuroscience research. It belongs to the family of rhodol-based calcium. Rhod-4™ is a high-affinity calcium indicator dye that exhibits changes in fluorescence intensity upon binding to calcium ions. When Rhod-4™ binds to calcium, its fluorescence intensity increases dramatically, allowing researchers to measure and monitor changes in calcium levels. Compared to the traditional Rhod-2, Rhod-4™ is a superior replacement. It is a valuable tool in calcium imaging research, enabling the detection and quantification of intracellular calcium dynamics. Its fluorescence properties and calcium binding specificity make it suitable for studying calcium signaling in various cell types and biological systems.