

NBD-Cl [4-Chloro-7-nitrobenzofurazan] *CAS 10199-89-0*

Catalog Number: 825

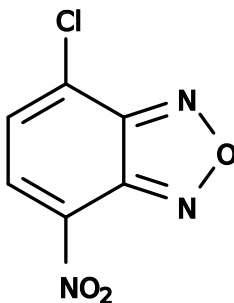
Unit Size: 25 mg

Product Details

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

Chemical Properties

Appearance	Solid off-white
Molecular Weight	199.55
Soluble In	DMSO
Chemical Structure	

**Spectral Properties**

Excitation Wavelength	467 nm
Emission Wavelength	539 nm

Applications

NBD-Cl is widely used to label peptides, proteins, drugs and other biomolecules. It is also a popular derivatizing reagent for HPLC analysis. NBD-Cl is non-fluorescent, and generates fluorescent adducts upon reacting with aliphatic amines or thiol compounds. It reacts with amino groups such as aliphatic amines, amino acids, peptides, and proteins to form highly fluorescent compounds. The NBD-amine adducts have λ_{ex} = 464 nm and λ_{em} = 512 nm in aqueous solutions. The fluorescence spectra of NBD-amine adducts are highly environment-sensitive, the fluorescence intensity decreases significantly in aqueous solutions. NBD-Cl also reacts with thiol group to form fluorescent adducts, but the thiol adducts are much less fluorescent than the amine adducts.