

Product Information Sheet

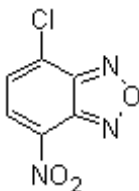
Ordering Information

Product Number:	825
Product Name:	NBD-Cl [4-Chloro-7-nitrobenzofurazan] *UltraPure grade*
Unit Size:	25 mg
Storage Conditions:	<-15 °C and kept from light and moisture
Expiration Date:	12 months upon receiving

Chemical and Spectral Properties

Molecular Weight: 199.55

Chemical Structure:



Soluble in: DMSO

Excitation Wavelength: 467 nm

Emission Wavelength: 539 nm

Application Notes

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 $\lambda_{ex} = 464$ nm and $\lambda_{em} = 512$ 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.