

Hoechst 33342 maleimide

Catalog Number: 17672

Unit Size: 1 mg

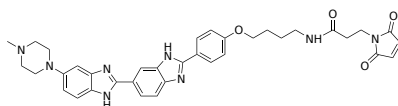
Product Details

Storage Conditions	Freeze (< -15 °C), Minimize light exposure
Expiration Date	24 months upon receiving

Chemical Properties

Appearance	Solid
Molecular Weight	646.75
Soluble In	DMSO

Chemical Structure



Spectral Properties

Excitation Wavelength	N/A
Emission Wavelength	N/A

Applications

Hoechst 33342 maleimide is an excellent building block for developing site-specific nucleic acid probes. It can be readily conjugated to thiol-containing biomolecules (such as antibodies, peptides and thiol-modified oligos). Hoechst 33342 is a DNA-specific dye that binds to the minor groove of double-stranded DNA. It emits blue fluorescence when bound to DNA. Its excitation maximum is around 350 nm, and the emission maximum is approximately 460 nm. Its ability to readily penetrate live cell membranes makes it suitable for staining live cells. Hoechst 33342 is commonly used in fluorescence microscopy to visualize the nucleus of cells. It selectively stains the DNA in the cell nucleus and is often used in combination with other fluorochromes to study cell structure and dynamics. Hoechst 33342 is used for cell cycle analysis in flow cytometry. By staining DNA, it allows researchers to distinguish between different phases of the cell cycle, such as G1, S, and G2/M.