

Psoralen TMP Succinimidyl Ester

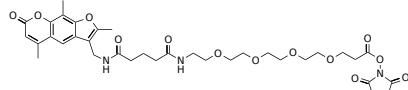
Catalog Number: 39060

Unit Size: 5 mg

Product Details

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

Chemical Properties

Appearance	Solid white
Molecular Weight	715.74
Soluble In	DMSO
Chemical Structure	 The chemical structure shows a psoralen core (a tricyclic furanocoumarin) linked via its 5,8-diol group to a triethylentetraacetate (TETA) chain. The TETA chain consists of a central nitrogen atom bonded to four ethylene groups, each terminating in a succinimidyl ester group (NHS-CH2-CH2-C(=O)-O-CH2-CH2-C(=O)-NH-).

Spectral Properties

Excitation Wavelength	N/A
Emission Wavelength	N/A

Applications

Psoralens and their derivatives (such as 8-TMP and 4,5',8-TMP) are well known to have unique crosslinking features to DNA. Psoralen TMP Succinimidyl Ester is an amino-reactive TMP derivative. It is an excellent building block for preparing TMP-labeled oligos from the readily available amino-modified oligos. The TMP-conjugated oligonucleotides can be used for sequence-specific crosslinking with a target DNA, thus enabling the application of psoralen-conjugated molecules in gene transcription inhibition, gene knockout, and other genomic applications. Psoralen TMP Succinimidyl Ester may also be used for preparing site-specific DNA/RNA probes via the conjugations with amino-containing biomolecules such as antibodies.