

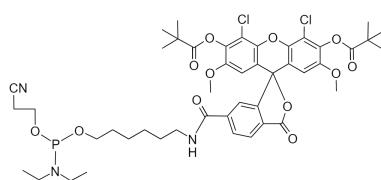
6-JOE Phosphoramidite

Catalog number: 6047, 6048, 6049
Unit size: 100 umoles, 1 g, 50 umoles

Product Details

Storage Conditions	Freeze (<-15 °C), Minimize light exposure
Expiration Date	6 months upon receiving

Chemical Properties

Appearance	White solid
Molecular Weight	972.89
Soluble In	MeCN
Chemical Structure	 The chemical structure shows a phosphoramidite group (dimethylaminomethyl phosphonate) attached to a 6-JOE (6-aminohexyl fluorescein) label. The label consists of a fluorescein core with a 6-aminohexyl side chain. The fluorescein part has two chlorine atoms at the 5 and 7 positions. The 6-aminohexyl part is linked to the 5' position of the fluorescein ring.

Spectral Properties

Excitation Wavelength	520 nm
Emission Wavelength	545 nm

Applications

There are several ways of labeling an oligonucleotide with fluorescein. The choice of label is diversified further, depending on the spectral requirements. 5'-fluorescein-CE phosphoramidite, derived from the single isomer 6-FAM, 6-HEX, 6-TET and 6-JOE, can all be used to efficiently label an oligonucleotide at the 5'-end. Labeling the 3'-end of an oligo with fluorescein can be achieved using 3'-Fluorescein CPGs. Standard cleavage and deprotection with ammonium hydroxide liberates the fluorescein-labeled oligo when using any of these supports. AAT Bioquest offers 6-FAM, 6-HEX, 6-TET and 6-JOE phosphoramidites for effectively labeling oligos. AAT Bioquest offers 6-JOE Phosphoramidite to facilitate the labeling of oligos with JOE. Helix Fluor™ 6-JOE Phosphoramidite can be conveniently used to prepare the oligos that have essentially identical spectral and biological properties to the ones that are derived from 6-JOE, SE.