

FAM-xtra CPG *500A*

Catalog Number: 6041, 6042

Unit Size: 100 mg, 1 g

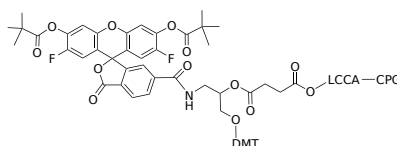
Product Details

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

Chemical Properties

Appearance	Solid light yellow
Molecular Weight	N/A
Soluble In	MeCN

Chemical Structure



Spectral Properties

Excitation Wavelength	493 nm
Emission Wavelength	517 nm

Applications

Fluorescein CPGs have traditionally been used to add the fluorescein label at the 3'-terminus. FAM-xtra is a new fluorophore that has the identical spectra to FAM, but is much brighter and more photostable than FAM. FAM-xtra CPG is used to add the significantly improved FAM label at the 3'-terminus in complimentary to our FAM-xtra Phosphoramidite that contains no 4,4'-dimethoxytrityl (DMT) group and can be added only once at the 5'-terminus, thereby terminating synthesis. Both FAM-xtra products are single isomers and use an amide linkage which is stable during cleavage and deprotection and does not allow isomer formation. FAM-xtra CPG allows effective blockage of the 3'-terminus from polymerase extension as well as exonuclease digestion. This support can be used in a manner identical to normal protected nucleoside support since it contains the DMT group. It can be deprotected using ammonium hydroxide as required by nucleobases. When using AMA, a small amount of a non-fluorescent impurity might be formed. Alternatively, it may be first deprotected with ammonium hydroxide for 30 minutes at room temperature, followed by the addition of an equal volume of 40% methylamine. The deprotection is completed as required by the nucleobases - e.g. 10 minutes at 65°C or 2 hours at room temperature for standard bases etc.