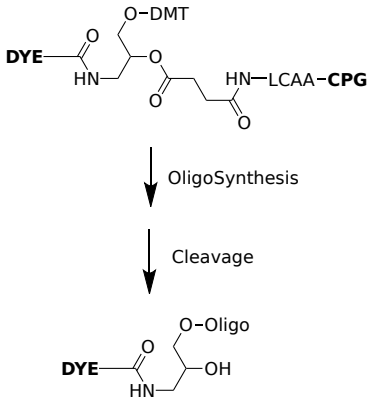
Tide Quencher™ 8 CPG [TQ8 CPG] *1000 Å*

Catalog Number: 2133
Unit Size: 100 mg

Product Details

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

Chemical Properties

Appearance	Solid
Molecular Weight	N/A
Soluble In	MeCN
Chemical Structure	

Spectral Properties

Excitation Wavelength	N/A
Emission Wavelength	N/A

Applications

Tide Quencher™ 8 (TQ8) is a non-fluorescent molecule designed to efficiently quench the fluorescence of IR fluorophores such as ICG, iFluor® 820, iFluor® 840 and iFluor® 860. It has the longest absorption wavelength among all the commercial quenchers. TQ8 is designed to be the most effective IR quencher with (a). much stronger absorption, and (b). much higher quenching efficiency for IR dyes. Tide Quencher™ 8 CPG is an excellent building block for preparing TQ8-labeled oligonucleotides. The oligo prepared from (TQ8 CPG) may be deprotected in 0.05M potassium carbonate in methanol for 4 hours at room temperature for 2 hours. Alternatively, the oligo may be deprotected in ammonium hydroxide at room temperature for 24-36 hours. It can be used in techniques such as polymerase chain reaction (PCR), real-time PCR, and DNA sequencing. In these applications, fluorescence signals are used to monitor the amplification or detection of specific DNA sequences. TQ8 quenches the fluorescent signal until a specific event (like DNA strand separation or primer extension) occurs, leading to an increase in fluorescence that can be detected and quantified.