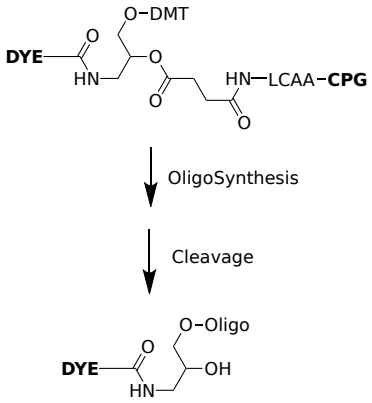
Tide Quencher™ 7.1 CPG [TQ7.1 CPG] *500 Å*

Catalog Number: 2116
Unit Size: 100 mg

Product Details

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

Chemical Properties

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

Spectral Properties

Excitation Wavelength	N/A
Emission Wavelength	N/A

Applications

Tide Quencher™ 7.1 (TQ7.1) is a non-fluorescent molecule designed to efficiently quench the fluorescence of common NIR fluorophores such as Cy7, Alexa Fluor® 700, Alexa Fluor® 750, iFluor® 700, iFluor® 710, iFluor® 720 and iFluor® 750. It is an improved version of TQ7 and BHQ3. TQ7.1 is designed to be a superior quencher with (a). much stronger absorption, and (b). much higher quenching efficiency for NIR dyes. Tide Quencher™ 7.1 CPG is an excellent building block for preparing TQ7.1-labeled oligonucleotides. The oligo prepared from (TQ7.1 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. TQ7.1 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.