

## Tide Quencher™ 7.2 CPG [TQ7.2 CPG] \*500 Å\*

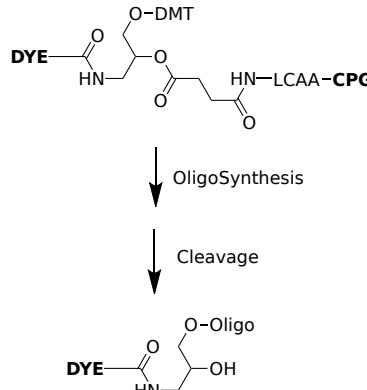
Catalog Number: 2124

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™ 7.2 (TQ7.2) 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. TQ7.2 is designed to be a superior quencher with (a). much stronger absorption, and (b). much higher quenching efficiency for NIR dyes. Tide Quencher™ 7.2 CPG is an excellent building block for preparing TQ7.2-labeled oligonucleotides. The oligo prepared from (TQ7.2 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. TQ7.2 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.