Product Information

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## Hydroxyl/t-Butyl ester PEG reagent, Hydroxy-PEG7-t-butyl ester, Purity 98%

Cat. No.: X24-03-YW0703 Size: 500 mg; 1 g; 2 g; 5 g CAS Number: 2737223-20-8 PubChem CID: 118796293 Synonym: 2737223-20-8; Hydroxy-PEG7-*t*-butyl ester; Hydroxy-PEG7-Boc; HO-PEG7-CH<sub>2</sub>CH<sub>2</sub>COOtBu

This product is for research use only and is not intended for diagnostic use.

## **Product Information**

| Description        | Hydroxy-PEG7- <i>t</i> -butyl ester is a PEG linker featuring a terminal hydroxyl group and a <i>t</i> -butyl-<br>protected carboxyl group. The PEG7 spacer enhances water solubility and hydrophilicity in aqueous<br>environments. The hydroxyl group provides versatility for chemical modifications, while the t-butyl<br>ester offers acid-labile protection for controlled carboxylic acid activation. |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Molecular Weight   | 454.6                                                                                                                                                                                                                                                                                                                                                                                                        |
| Molecular Formula  | C <sub>21</sub> H <sub>42</sub> O <sub>10</sub>                                                                                                                                                                                                                                                                                                                                                              |
| Functional Group 1 | Hydroxyl                                                                                                                                                                                                                                                                                                                                                                                                     |
| Functional Group 2 | <i>t</i> -Butyl ester                                                                                                                                                                                                                                                                                                                                                                                        |
| Reactive Group 1   | Acid                                                                                                                                                                                                                                                                                                                                                                                                         |
| Reactive Group 2   | Nucleophile                                                                                                                                                                                                                                                                                                                                                                                                  |
| IUPAC Name         | <i>Tert</i> -butyl 3-[2-[2-[2-[2-[2-(2-hydroxyethoxy)ethoxy]ethoxy]ethoxy]ethoxy]ethoxy]propanoate                                                                                                                                                                                                                                                                                                           |
| InChl              | InChI=1S/C21H42O10/c1-21(2,3)31-20(23)4-6-24-8-10-26-12-14-28-16-18-30-19-17-29-15-13-27-1<br>1-9-25-7-5-22/h22H,4-19H2,1-3H3                                                                                                                                                                                                                                                                                |
| InChI Key          | MEUULGVIOWAYGZ-UHFFFAOYSA-N                                                                                                                                                                                                                                                                                                                                                                                  |
| Canonical SMILES   | 000000000000000000000000000000000000000                                                                                                                                                                                                                                                                                                                                                                      |
| Form               | Liquid                                                                                                                                                                                                                                                                                                                                                                                                       |
| Purity             | 98%                                                                                                                                                                                                                                                                                                                                                                                                          |
| Identity           | Confirmed by NMR.                                                                                                                                                                                                                                                                                                                                                                                            |
| Applications       | Hydroxy-PEG7- <i>t</i> -butyl ester is widely used in bioconjugation, drug delivery, and material synthesis.<br>Its hydroxyl group supports further functionalization, and the t-butyl ester enables precise carboxyl activation under acidic conditions, making it ideal for creating hydrophilic linkers and functionalized                                                                                |

## materials in pharmaceutical and biomedical research.

Storage

Store at -20°C.