

Product Information

Hydroxyl/*t*-Butyl protected carboxyl PEG reagent, Hydroxy-PEG2-CH₂CO₂tBu, Purity 95%

Cat. No.: X24-03-YW0659

Size: 500 mg; 1 g; 5 g

MDL: MFCD25959245

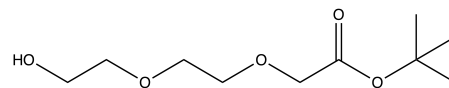
CAS Number: 149299-82-1

PubChem CID: 19780618

Synonym: 149299-82-1; Hydroxy-PEG2-CH₂CO₂tBu; *Tert*-Butyl

2-(2-(2-hydroxyethoxy)ethoxy)acetate; Hydroxy-PEG2-*t*-Butyl acetate;

HO-PEG2-CH₂COOtBu



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

Product Information

Description	Hydroxy-PEG2-CH ₂ CO ₂ tBu is a PEG linker featuring a terminal hydroxyl group and a <i>t</i> -butyl-protected carboxyl group. The PEG2 spacer enhances solubility in aqueous environments, while the hydroxyl group allows versatile functionalization. The <i>t</i> -butyl group provides acid-labile protection for controlled carboxyl activation.
Molecular Weight	220.3
Molecular Formula	C ₁₀ H ₂₀ O ₅
Functional Group 1	Hydroxyl
Functional Group 2	<i>t</i> -Butyl protected carboxyl
Reactive Group 1	Acid
Reactive Group 2	Nucleophile
IUPAC Name	<i>Tert</i> -butyl 2-[2-(2-hydroxyethoxy)ethoxy]acetate
InChI	InChI=1S/C10H20O5/c1-10(2,3)15-9(12)8-14-7-6-13-5-4-11/h11H,4-8H2,1-3H3
InChI Key	LMDJRQVQNFNFAK-UHFFFAOYSA-N
Canonical SMILES	CC(C)(C)OC(=O)COCCOCCO
Form	Liquid
Purity	95%
Solubility	Water, DMSO, DCM, DMF
Identity	Confirmed by NMR.

Applications	Hydroxy-PEG2-CH ₂ CO ₂ tBu is used in bioconjugation, drug delivery, and material synthesis. The hydroxyl group supports further derivatization, while the t-butyl ester ensures precise activation of the carboxyl group under acidic conditions, making it ideal for creating hydrophilic linkers and functional materials.
Storage	Store at -20°C.