

PRODUCT INFORMATION



Boc-NH-PEG₃-OH

Item No. 30496

CAS Registry No.: 139115-92-7

Formal Name: N-[2-[2-(2-hydroxyethoxy)ethoxy]ethyl]-carbamic acid, 1,1-dimethylethyl ester

MF: C₁₁H₂₃NO₅

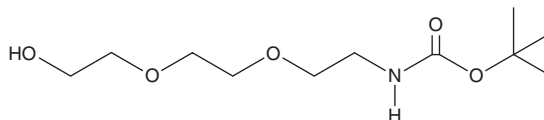
FW: 249.3

Purity: ≥95%

Supplied as: A liquid

Storage: -20°C

Stability: ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Boc-NH-PEG₃-OH is supplied as a liquid. A stock solution may be made by dissolving the Boc-NH-PEG₃-OH in the solvent of choice, which should be purged with an inert gas. Boc-NH-PEG₃-OH is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of Boc-NH-PEG₃-OH in ethanol and DMSO is approximately 15 mg/ml and approximately 30 mg/ml in DMF.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of Boc-NH-PEG₃-OH can be prepared by directly dissolving the liquid in aqueous buffers. The solubility of Boc-NH-PEG₃-OH in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Boc-NH-PEG₃-OH is a PEGylated building block that contains a *tert*-butoxy carbonyl (Boc) protecting group.¹ It has been used as a spacer in biotinylated heterobifunctional cross-linker agents and in near infrared imaging probes for the cytochrome P450 (CYP) isoform CYP1B1, which is expressed in a variety of tumors.^{1,2} Boc-NH-PEG₃-OH has also been used in the synthesis of graftable peptidomimetics that bind to human αVβ3 integrin and inhibit adhesion of human osteoprogenitor cells to vitronectin.³

References

1. Hatanaka, Y., Hashimoto, M., and Kanaoka, Y. A novel biotinylated heterobifunctional cross-linking reagent bearing an aromatic diazirine. *Bioorg. Med. Chem.* **2**(12), 1367-1373 (1994).
2. Meng, Q., Wang, Z., Cui, J., *et al.* Design, synthesis, and biological evaluation of cytochrome P450 1B1 targeted molecular imaging probes for colorectal tumor detection. *J. Med. Chem.* **61**(23), 10901-10909 (2018).
3. Rerat, V., Dive, G., Cordii, A.A., *et al.* αVβ3 Integrin-targeting arg-gly-aspartic acid (RGD) peptidomimetics containing oligoethylene glycol (OEG) spacers. *J. Med. Chem.* **52**(22), 7029-7043 (2009).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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