

# PRODUCT INFORMATION



## Boc-L-Arg-OH

Item No. 30448

**CAS Registry No.:** 13726-76-6  
**Formal Name:** N<sup>2</sup>-[(1,1-dimethylethoxy)carbonyl]-L-arginine  
**Synonyms:** N<sup>α</sup>-(*t*-butoxycarbonyl)-L-Arginine-OH,  
N<sup>α</sup>-Boc-L-Arginine,  
N-<sup>α</sup>-Butoxycarbonyl-L-Arginine,  
N-*tert*-Butoxycarbonyl-L-Arginine

**MF:** C<sub>11</sub>H<sub>22</sub>N<sub>4</sub>O<sub>4</sub>

**FW:** 274.3

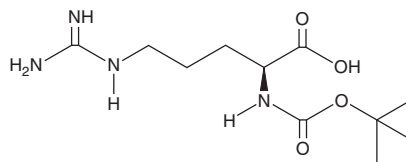
**Purity:** ≥95%

**Supplied as:** A solid

**Storage:** -20°C

**Stability:** ≥4 years

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



### Laboratory Procedures

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

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-L-Arg-OH can be prepared by directly dissolving the solid in aqueous buffers. The solubility of Boc-L-Arg-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-L-Arg-OH is an amino acid building block.<sup>1-3</sup> It has been used in the synthesis of antibacterial peptides and as an *in vitro* model substrate in the study of methylglyoxal peptide crosslinking *via* the Maillard reaction.

### References

1. Strøm, M.B., Haug, B.E., Skar, M.L., *et al.* The pharmacophore of short cationic antibacterial peptides. *J. Med. Chem.* **46(9)**, 1567-1570 (2003).
2. Lederer, M.O. and Klaiber, R.G. Cross-linking of proteins by Maillard processes: Characterization and detection of lysine-arginine cross-links derived from glyoxal and methylglyoxal. *Bioorg. Med. Chem.* **7(11)**, 2499-2507 (1999).
3. Al-Abed, Y., Mitsuhashi, T., Ulrich, P., *et al.* Novel modifications of N<sup>α</sup>-boc-arginine and N<sup>α</sup>-CBZ-lysine by methylglyoxal. *Bioorg. Med. Chem. Lett.* **6(13)**, 1577-1578 (1996).

#### 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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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD

ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897

[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM