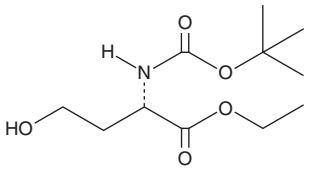
PRODUCT INFORMATION

(S)-N-Boc-L-Homoserine ethyl ester

Item No. 30547

CAS Registry No.:	147325-09-5
Formal Name:	N-[(1,1-dimethylethoxy)carbonyl]-L-homoserine, ethyl ester
Synonym:	N-Boc L-Homoserine ethyl ester
MF:	$C_{11}H_{21}NO_5$
FW:	247.3
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

(S)-N-Boc-L-homoserine ethyl ester is supplied as a solid. A stock solution may be made by dissolving the (S)-N-Boc-L-homoserine ethyl ester in the solvent of choice, which should be purged with an inert gas. (S)-N-Boc-L-homoserine ethyl ester is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of (S)-N-Boc-L-homoserine ethyl ester in ethanol is approximately 20 mg/ml and approximately 25 mg/ml in DMSO and 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 (S)-N-Boc-L-homoserine ethyl ester can be prepared by directly dissolving the solid in aqueous buffers. The solubility of (S)-N-Boc-L-homoserine ethyl ester in PBS, pH 7.2, is approximately 3 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

(S)-N-Boc-L-homoserine ethyl ester is a synthetic intermediate in the synthesis of unsaturated caprolactams and monomer units for oxy-peptide nucleic acids from the starting material L-homoserine.[1,2]

References

1. Janey, J.M., Orella, C.J., Njolito, E., *et al.* Raney-Co mediated reductive cyclization of an α,β-unsaturated nitrile. *J. Org. Chem.* **73(8)**, 3212-3217 (2008).
2. Kuwahara, M., Arimitsu, M., and Sisido, M. Synthesis of δ-amino acids with an ether linkage in the main chain and nucleobases on the side chain as monomer units for oxy-peptide nucleic acids. *Tetrahedron* **55(33)**, 10067-10078 (1999).

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