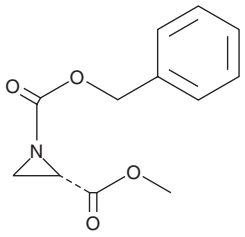
PRODUCT INFORMATION

Methyl (S)-(–)-N-Z-Aziridine-2-carboxylate

Item No. 20731

CAS Registry No.: 104597-98-0
Formal Name: (2S)-1,2-aziridinedicarboxylic acid, 2-methyl 1-(phenylmethyl) ester
MF: $C_{12}H_{13}NO_4$
FW: 235.2
Purity: ≥98%
UV/Vis.: λ_{max}: 258 nm
Supplied as: A neat oil
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Methyl (S)-(–)-N-Z-aziridine-2-carboxylate is supplied as a neat oil. A stock solution may be made by dissolving the methyl (S)-(–)-N-Z-aziridine-2-carboxylate in the solvent of choice, which should be purged with an inert gas. Methyl (S)-(–)-N-Z-aziridine-2-carboxylate is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of methyl (S)-(–)-N-Z-aziridine-2-carboxylate in ethanol and DMSO is approximately 20 mg/ml and approximately 30 mg/ml in DMF.

Methyl (S)-(–)-N-Z-aziridine-2-carboxylate is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, methyl (S)-(–)-N-Z-aziridine-2-carboxylate should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Methyl (S)-(–)-N-Z-aziridine-2-carboxylate has a solubility of approximately 0.125 mg/ml in a 1:7 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Methyl (S)-(–)-N-Z-aziridine-2-carboxylate is a chiral building block that is commonly used in the organic stereoselective synthesis of various compounds, including anticancer agents, antibiotics, and enzyme inhibitors.[1,2]

References

1. Li, Y., Hayman, E., Plesescu, M., *et al.* Synthesis of potent BCRP inhibitor - Kol143. *Tetrahedron Lett.* **49(9)**, 1480–1483 (2008).
2. Bartoccini, F., Venturi, S., Retini, M., *et al.* Total synthesis of (-)-clavicipitic acid via γ,γ-dimethylallyltryptophan (DMAT) and chemoselective C-H hydroxylation. *J. Org. Chem.* **84(12)**, 8027-8034 (2019).

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