

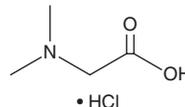
PRODUCT INFORMATION



N,N-Dimethylglycine (hydrochloride)

Item No. 33830

CAS Registry No.: 2491-06-7
Formal Name: N,N-dimethyl-glycine, monohydrochloride
Synonyms: Dimethylglycine, DMG
MF: C₄H₉NO₂ • HCl
FW: 139.6
Purity: ≥98%
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

N,N-Dimethylglycine (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the N,N-dimethylglycine (hydrochloride) in the solvent of choice, which should be purged with an inert gas. N,N-Dimethylglycine (hydrochloride) is soluble in the organic solvent DMSO at a concentration of approximately 10 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 N,N-dimethylglycine (hydrochloride) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of N,N-dimethylglycine (hydrochloride) in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

N,N-Dimethylglycine is a synthetic intermediate.^{1,2} It has been used in the synthesis of water-soluble prodrug forms of vitamin E and vitamin K₁ (Item No. 21051).

References

1. Takata, J., Hidaka, R., Yamasaki, A., *et al.* Novel *d*-γ-tocopherol derivative as a prodrug for *d*-γ-tocopherol and a two-step prodrug for *S*-γ-CEHC. *J. Lipid Res.* **43(12)**, 2196-2204 (2002).
2. Takata, J., Karube, Y., Matsunga, K., *et al.* Prodrugs for systemic bioreductive activation-independent delivery of phyllohydroquinone, an active form of phylloquinone (vitamin K₁). 1: Preparation and *in vitro* evaluation. *Biol. Pharm. Bull.* **22(12)**, 1347-1354 (1999).

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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