

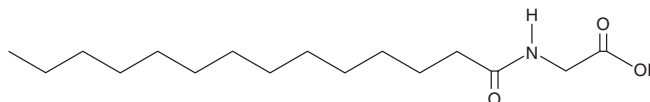
PRODUCT INFORMATION



Myristoyl Glycine

Item No. 30107

CAS Registry No.: 14246-55-0
Formal Name: N-(1-oxotetradecyl)-glycine
Synonyms: N-Myristoyl-glycine, NSC 622050,
N-Tetradecanoyl-glycine
MF: C₁₆H₃₁NO₃
FW: 285.4
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

Myristoyl glycine is supplied as a solid. A stock solution may be made by dissolving the myristoyl glycine in the solvent of choice, which should be purged with an inert gas. Myristoyl glycine is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of myristoyl glycine in ethanol is approximately 0.5 mg/ml and approximately 10 mg/ml in DMSO and DMF.

Myristoyl glycine is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, myristoyl glycine should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Myristoyl glycine has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Myristoyl glycine is a lipidated amino acid and fatty amide and an endogenous metabolite.¹ It induces browning of human Simpson-Golabi-Behmel syndrome (SGBS) preadipocytes when used at concentrations ranging from 0.0001 to 20 μM. Myristoyl glycine has been used as an immunogen to raise antibodies against myristoylated proteins and as a synthetic intermediate in the synthesis of lipopeptides.^{2,3}

References

1. Guijas, C., To, A., Montenegro-Burke, J.R., *et al.* Drug-initiated activity metabolomics identifies myristoylglycine as a potent endogenous metabolite for human brown fat differentiation. *Metabolites* **12**(8), 749 (2022).
2. Shoji, S., Tashiro, A., Takenaka, O., *et al.* Antibodies to an NH₂-terminal myristoyl glycine moiety can detect NH₂-terminal myristoylated proteins in the retrovirus-infected cells. *Biochem. Biophys. Res. Commun.* **162**(2), 724-732 (1989).
3. Cotté, A., Bader, B., Kuhlmann, J., *et al.* Synthesis of the N-terminal lipohexapeptide of human GaO-protein and fluorescent-labeled analogues for biological studies. *Chem. Eur. J.* **5**(3), 922-936 (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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