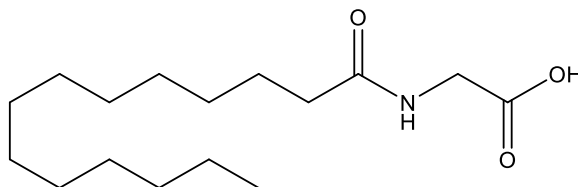


Catalog # 10-3783

N-Myristoylglycine

CAS# 14246-55-0

N-Tetradecanoylglycine; 2-(Tetradecanoylamino)acetic acid; N-(1-Oxotetradecyl)glycine; Myristoyl glycine; NSC 622050;
Myr-Gly
Lot # S107024



Endogenous lipid which was found to differentiate adipocyte precursors and white-biased adipocytes into functional brown adipocytes.¹ Blood plasma and urine biomarker of primary dysmenorrhea.² A standard for analysis of N-terminal myristoylated peptides and proteins.^{3,4} Enzymatically produced in mammals from myristoyl-coenzyme A and glycine by acyl-CoA:glycine N-acyltransferase.⁵

- 1) Guijas *et al.* (2022), *Drug-Initiated Activity Metabolomics Identifies Myristoylglycine as a Potent Endogenous Metabolite for Human Brown Fat Differentiation*; *Metabolites*, **12** 749
- 2) Liu *et al.* (2013), *Biomarkers of primary dysmenorrhea and herbal formula intervention: an exploratory metabolomics study of blood plasma and urine*; *Mol. Biosyst.*, **9** 77
- 3) Okimura *et al.* (2003), *HPLC analysis of fatty acyl-glycine in the aqueous methanesulfonic acid hydrolysates of N-terminally fatty acylated peptides*; *Biol. Pharm. Bull.*, **26** 1166
- 4) Resh *et al.* (2016), *Fatty acylation of proteins: The long and the short of it*; *Prog. Lipid Res.*, **63** 120
- 5) Merkler *et al.* (1996), *Fatty acid amide biosynthesis: a possible new role for peptidylglycine alpha-amidating enzyme and acyl-coenzyme A: glycine N-acyltransferase*; *Arch. Biochem. Biophys.*, **330** 430

PHYSICAL DATA

Molecular Weight: 285.43
Molecular Formula: C₁₆H₃₁NO₃
Purity: >98% by TLC
NMR: (Conforms)
Solubility: DMSO (45 mg/ml)
Physical Description: White solid
Storage and Stability: Store as supplied desiccated at -20°C for up to 2 years from the date of purchase.
Solutions in DMSO may be stored at -20°C for up to 2 months.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.