

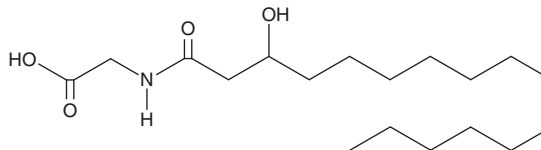
PRODUCT INFORMATION



Commendamide

Item No. 18421

CAS Registry No.: 193825-78-4
Formal Name: N-(3-hydroxy-1-oxohexadecyl)-glycine
Synonym: N-acyl-3-hydroxypalmitoyl-Glycine
MF: C₁₈H₃₅NO₄
FW: 329.5
Purity: ≥95%
Supplied as: A crystalline 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

Commendamide is supplied as a crystalline solid. A stock solution may be made by dissolving the commendamide in the solvent of choice. Commendamide is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of commendamide in these solvents is approximately 15, 20, and 25 mg/ml, respectively.

Commendamide is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, commendamide should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Commendamide has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Commendamide is a natural bacterial product that was discovered in a screen for commensal bacteria effector genes (Cbegs).¹ Cbeg12 is a bacterial effector gene that encodes for its production. Commendamide is structurally similar to long-chain N-acyl-amides, which commonly signal, in mammals, through G protein-coupled receptors. Commendamide activates GPR132 (also known as G2A) with an EC₅₀ value of 11.8 μM.¹

Reference

1. Cohen, L.J., Kang, H.-S., Chu, J., *et al.* Functional metagenomic discovery of bacterial effectors in the human microbiome and isolation of commendamide, a GPCR G2A/132 agonist. *Proc. Natl. Acad. Sci. USA* **112**(35), E4825-E4834 (2015).

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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