PRODUCT INFORMATION



N-(3-Phenylpropionyl)glycine

Item No. 34392

CAS Registry No.: 56613-60-6

Formal Name: N-(1-oxo-3-phenylpropyl)-glycine

MF: $C_{11}H_{13}NO_3$ FW: **Purity:** ≥98% Supplied as: A solid -20°C Storage: Stability: ≥4 years

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

Laboratory Procedures

N-(3-Phenylpropionyl)glycine is supplied as a solid. A stock solution may be made by dissolving the N-(3-phenylpropionyl)glycine in the solvent of choice, which should be purged with an inert gas. N-(3-Phenylpropionyl)glycine is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of N-(3-phenylpropionyl)glycine in these solvents is approximately 30 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-(3-phenylpropionyl)glycine can be prepared by directly dissolving the solid in aqueous buffers. The solubility of N-(3-phenylpropionyl)glycine in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

N-(3-Phenylpropionyl)glycine is an acylglycine. ¹ Urinary levels of N-(3-phenylpropionyl)glycine are increased in patients with medium-chain acyl-CoA dehydrogenase (MCAD) deficiency, an inborn error of metabolism characterized by intolerance to fasting, episodic vomiting, hypoketotic hypoglycemia, and dicarboxylic aciduria.

Reference

1. Rinaldo, P., O'Shea, J.J., Coates, P.M., et al. Medium-chain acyl-CoA dehydrogenase deficiency. Diagnosis by stable-isotope dilution measurement of urinary n-hexanoylglycine and 3-phenylpropionylglycine. N. Engl. J. Med. 319(20), 1308-1313 (1988).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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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