

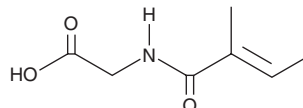
PRODUCT INFORMATION



Tiglyl Glycine

Item No. 41836

CAS Registry No.: 35842-45-6
Formal Name: N-[(2E)-2-methyl-1-oxo-2-buten-1-yl]-glycine
Synonym: N-Tigloylglycine
MF: C₇H₁₁NO₃
FW: 157.2
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

Tiglyl glycine is supplied as a solid. A stock solution may be made by dissolving the tiglyl glycine in the solvent of choice, which should be purged with an inert gas. Tiglyl glycine is soluble (≥10 mg/ml) in ethanol and sparingly soluble (1-10 mg/ml) in DMSO.

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 tiglyl glycine can be prepared by directly dissolving the solid in aqueous buffers. Tiglyl glycine is soluble (≥10 mg/ml) in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

Description

Tiglyl glycine is an amino acid conjugate and intermediate in the catabolism of the amino acid isoleucine.¹ It is formed from tiglyl-CoA by glycine-N-acyltransferase. Urinary tiglyl glycine levels are increased in patients with β-ketothiolase deficiency, propionate metabolism disorders, or respiratory chain disorders.^{1,2}

References

1. Bennett, M.J., Powell, S., Swartling, D.J., *et al.* Tiglylglycine excreted in urine in disorders of isoleucine metabolism and the respiratory chain measured by stable isotope dilution GC-MS. *Clin. Chem.* **40**(10), 1879-1883 (1994).
2. Villani, G.R., Gallo, G., Scolamiero, E., *et al.* "Classical organic acidurias": Diagnosis and pathogenesis. *Clin. Exp. Med.* **17**(3), 305-323 (2017).

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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