PRODUCT INFORMATION



Glutaurine

Item No. 39586

CAS Registry No.: 56488-60-9

Formal Name: N-(2-sulfoethyl)-L-glutamine

Synonyms: y-Glutamyl Taurine, y-L-Glutamyl Taurine

MF: $C_7H_{14}N_2O_6S$

FW: 254.3 **Purity:** ≥90% 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

Glutaurine is supplied as a solid. Aqueous solutions of glutaurine can be prepared by directly dissolving the solid in aqueous buffers. The solubility of glutaurine in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Glutaurine is a dipeptide composed of L-glutamic acid (Item No. 30377) and taurine (Item No. 27031) that has been found in rat brain. It is formed from glutathione and taurine by y-glutamyl transpeptidase. Glutaurine enhances potassium-induced release of L-glutamate and inhibits kainate-induced formation of cGMP in isolated mouse cerebral cortical slices when used at concentrations of 0.1 and 1 mM, respectively.² It decreases plasma levels of triiodothyronine (T3) and increases plasma thyroid-stimulating hormone (TSH) levels in rats when administered at a dose of 600 µg/kg.³ Glutaurine (50 µg/animal, p.o.) prevents electroconvulsive shock-induced amnesia in rats.4

References

- 1. Török, K., Varga, V., Somogyi, J., et al. Formation of y-glutamyl-taurine in the rat brain. Neurosci. Lett. 27(2), 145-149 (1981).
- 2. Varga, V., Janáky, R., Marnela, K.-M., et al. Interactions of γ-L-glutamyltaurine with excitatory aminoacidergic neurotransmission. Neurochem. Res. 19(3), 243-248 (1994).
- Baskin, S.I., Bartuska, D., Thampi, N., et al. The effect of glutaurine on thyroid hormones in the rat. Neuropeptides 9(1), 45-50 (1987).
- Balazs, M. and Telegdy, G. Effects of glutaurine treatment on electroshock-induced amnesia. Antiamnesic action of glutaurine. Neuropeptides 12(2), 55-58 (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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