

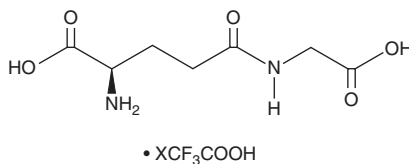
PRODUCT INFORMATION



γ -D-Glutamylglycine (trifluoroacetate salt)

Item No. 36278

CAS Registry No.: 71822-19-0
Formal Name: N-D- γ -glutamyl-glycine, trifluoroacetate salt
Synonym: γ -DGG
MF: $C_7H_{12}N_2O_5 \cdot CF_3COOH$
FW: 318.2
Purity: $\geq 95\%$
Supplied as: A solid
Storage: $-20^\circ C$
Stability: ≥ 4 years



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

Laboratory Procedures

γ -D-Glutamylglycine (γ -DGG) (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the γ -DGG (trifluoroacetate salt) in water. We do not recommend storing the aqueous solution for more than one day.

Description

γ -DGG is an antagonist of the excitatory amino acids NMDA (Item No. 14581), quisqualate, kainate, and glutamate.¹ It decreases the amplitude of excitatory post-synaptic potentials (EPSPs) in electrically stimulated rat hippocampal slices when used at a concentration of 200 μM . Subdural administration of γ -DGG inhibits NMDA-, kainate-, or quisqualate-induced paw biting, indicating antinociceptive activity, in mice ($EC_{50}s = 63, 9.5, \text{ and } 31 \mu M$, respectively).² γ -DGG reduces sound-induced wild running and inhibits the clonic and tonic phases of sound-induced seizures in DBA/2 mice ($ED_{50}s = 0.058, 0.046, \text{ and } 0.054 \mu mol, i.c.v.,$ respectively).³

References

1. Crunelli, S., Fonda, S., and Kelly, J.S. Blockade of amino acid-induced depolarizations and inhibition of excitatory post-synaptic potentials in rat dentate gyrus. *J. Physiol.* **341**, 627-640 (1983).
2. Raigorodsky, G. and Urca, G. Spinal antinociceptive effects of excitatory amino acid antagonists: Quisqualate modulates the action of N-methyl-D-aspartate. *Eur. J. Pharmacol.* **182(1)**, 37-47 (1990).
3. Croucher, M.J., Collins, J.F., and Meldrum, B.S. Anticonvulsant action of excitatory amino acid antagonists. *Science* **216(4548)**, 899-901 (1982).

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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