

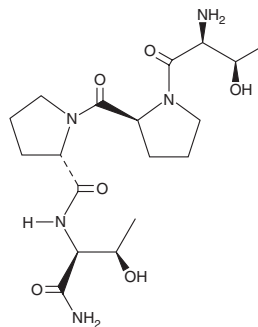
PRODUCT INFORMATION



GLYX 13

Item No. 21385

CAS Registry No.: 117928-94-6
Formal Name: L-threonyl-L-prolyl-L-prolyl-L-threoninamide
Synonym: Rapastinel
MF: C₁₈H₃₁N₅O₆
FW: 413.5
Purity: ≥98%
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

GLYX 13 is supplied as a crystalline solid. A stock solution may be made by dissolving the GLYX 13 in the solvent of choice, which should be purged with an inert gas. GLYX 13 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of GLYX 13 in these solvents is approximately 10, 15, and 25 mg/ml, respectively.

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 GLYX 13 can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of GLYX 13 in PBS, pH 7.2, is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

GLYX 13 is a monoclonal antibody-derived tetrapeptide that acts as a partial agonist at the glycine site of the N-methyl-D-aspartate (NMDA) receptor.^{1,2} It is active *in vivo* when administered intravenously, and it readily passes through the blood-brain barrier.^{1,3} GLYX 13 has diverse effects in animals, as it blocks neuropathic pain, enhances learning and memory, and significantly reduces anxiety.²⁻⁴ GLYX 13 induces rapid antidepressant-like effects in animal models and rescued normal behavior in a rat model of autism.⁵⁻⁷

References

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3. Burgdorf, J., Zhang, X.-l., Weiss, C., *et al. Neurobiol. Aging* **32(4)**, 698-706 (2011).
4. Jin, Z.-L., Liu, J.-X., Liu, X., *et al. J. Psychopharmacol.* **30(9)**, 913-921 (2016).
5. Burgdorf, J., Zhang, X.-l., Nicholson, K.L., *et al. Neuropsychopharmacology* **38(5)**, 729-742 (2013).
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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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