

## Catalog # 10-2535 Gabapentin lactam

CAS# 64744-50-9 4,4-Pentamethylene-2-pyrrolidone; GBP-L Lot # X101430



Reduces protein aggregates and improves motor performance in a transgenic mouse model of Huntington's disease.<sup>1</sup> Displays neurotrophic effects, enhancing the formation of dendritic filopodia and inducing a network of F-actin-containing neurites in cultured hippocampal neurons.<sup>2</sup> Promotes the survival of cultured central nervous system neurons possibly by opening mitochondrial K<sub>ATP</sub> channels.<sup>3</sup> Displays neuroprotective effects in a rat model of acute retinal ischemia.<sup>4</sup>

- 1) Zucker et al. (2004), Gabapentin-lactam, but not gabapentin, reduces protein aggregates and improves motor performance in transgenic mouse model of huntington's disease; Nauyn Schmiedebergs Arch. Pharmacol., **370** 131
- 2) Henle *et al.* (2006), *Gabapentin-lactam induces dendritic filopodia and motility in cultured hippocampal neurons*; J. Pharmacol. Exp. Ther., **319** 181
- 3) Pielen et al. (2004), Retinal ganglion cell survival is enhanced by gabapentin-lactam in vitro: evidence for involvement of mitochondrial KATP channels; Graefes Arch. Clin. Exp. Ophthalmol., **242** 240
- 4) Lagreze et al. (2001), The neuroprotective properties of gabapentin-lactam; Graefes Arch. Clin. Exp. Ophthalmol., 239 845

## PHYSICAL DATA

Molecular Weight:	153.22
Molecular Formula:	C <sub>9</sub> H <sub>15</sub> NO
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 40 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied desiccated at room temperature for up to 1 year from the date of purchase.
	Solutions in DMSO may be stored at $-20^{\circ}$ C for up to 2 months.

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