



LKT Laboratories, Inc.

## Gabapentin

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### Product Information

**Product ID** G0106

**CAS No.** 60142-96-3

**Chemical Name** 1-(Aminomethyl)-cyclohexaneacetic acid

**Synonym** GOE-3450, Neurontin

**Formula** C<sub>9</sub>H<sub>17</sub>NO<sub>2</sub>

**Formula Wt.** 171.24

**Melting Point** 162-166°C

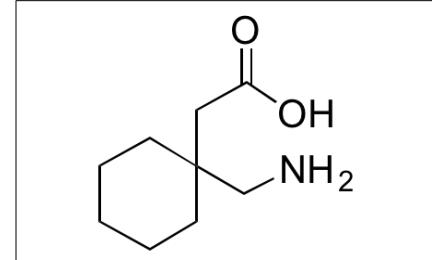
**Purity** ≥98%

**Solubility** Soluble in water (pH 7.4).

**Store Temp** Ambient

**Ship Temp** Ambient

**Description** Gabapentin exhibits antiepileptic/anticonvulsant, sedative, analgesic, and antinociceptive activities. Gabapentin is a GABA analog that does not bind GABA receptors. Gabapentin binds the α<sub>2</sub>δ subunit of voltage-gated Ca<sup>2+</sup> channels, decreasing Ca<sup>2+</sup> currents and inhibiting Ca<sup>2+</sup> signaling; gabapentin also activates adenosine A<sub>1</sub> receptors, binds NMDA receptors, and potentiates the effects of GABA signaling. Gabapentin is clinically used to prevent seizures and to treat neuropathic, inflammatory, and cancer-related pain.



**Bulk quantities available upon request**

**Product ID** **Size**

G0106 10 mg

G0106 50 mg

G0106 250 mg

**References** Kukkar A, Bali A, Singh N, et al. Implications and mechanism of action of gabapentin in neuropathic pain. Arch Pharm Res. 2013 Mar;36(3):237-51. PMID: 23435945.

Davies A, Hendrich J, Van Minh AT, et al. Functional biology of the α(2)δ subunits of voltage-gated calcium channels. Trends Pharmacol Sci. 2007 May;28(5):220-8. PMID: 17403543.

Johannessen SI, Ben-Menachem E. Management of focal-onset seizures: an update on drug treatment. Drugs. 2006;66(13):1701-25. PMID: 16978035.

Ho KY, Gan TJ, Habib AS. Gabapentin and postoperative pain--a systematic review of randomized controlled trials. Pain. 2006 Dec 15;126(1-3):91-101. PMID: 16846695.

**Caution:** This product is intended for laboratory and research use only. It is not for human or drug use.