



LKT Laboratories, Inc.

Carbamazepine

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Product Information

Product ID C0270

CAS No. 298-46-4

Chemical Name 5H-Dibenz[b,f]azepine-5-carboxamide

Synonym Biston, Carbatrol, Epitol, Sirtal, Telesmin, Timonil

Formula C₁₅H₁₂N₂O

Formula Wt. 236.27

Melting Point 190-193 °C

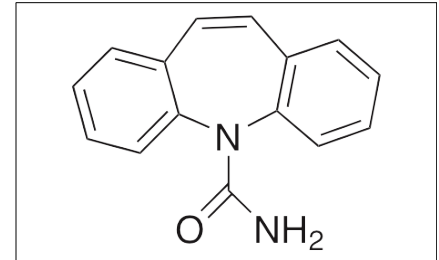
Purity ≥98%

Solubility Soluble in alcohol, acetone
or propylene glycol.
Practically insoluble in
water.

Store Temp 4 °C

Ship Temp Ambient

Description Carbamazepine is an antiepileptic/anticonvulsant that also exhibits antipsychotic and anti-inflammatory activities. Carbamazepine inhibits voltage-gated Na⁺ channels, stabilizing the inactive conformation of the channel. Carbamazepine also potentiates GABA receptor signaling and inhibits ATP-sensitive K⁺ channels. Carbamazepine is clinically used to treat epilepsy, bipolar disorder, neuralgia/neuropathic pain, ADHD, schizophrenia, and post-traumatic stress disorder (PTSD). In animal models, carbamazepine decreases LPS-induced expression of TNF-α and IL-1β.



Bulk quantities available upon request

Product ID	Size
C0270	1 g
C0270	5 g
C0270	25 g

References Gómez CD, Buijs RM, Sitges M. The anti-seizure drugs vinpocetine and carbamazepine, but not valproic acid, reduce inflammatory IL-1β and TNF-α expression in rat hippocampus. *J Neurochem.* 2014 Jun 5. [Epub ahead of print]. PMID: 24903676.

Zhou Q, Chen PC, Devaraneni PK, et al. Carbamazepine inhibits ATP-sensitive potassium channel activity by disrupting channel response to MgADP. *Channels (Austin).* 2014 May 21;8(4). [Epub ahead of print]. PMID: 24849284.

Rahman W, Dickenson AH. Voltage gated sodium and calcium channel blockers for the treatment of chronic inflammatory pain. *Neurosci Lett.* 2013 Dec 17;557 Pt A:19-26. PMID: 23941888.

Bialer M. Why are antiepileptic drugs used for nonepileptic conditions? *Epilepsia.* 2012 Dec;53 Suppl 7:26-33. PMID: 23153207.

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