LKT Laboratories, Inc.

(+)-Bicuculline

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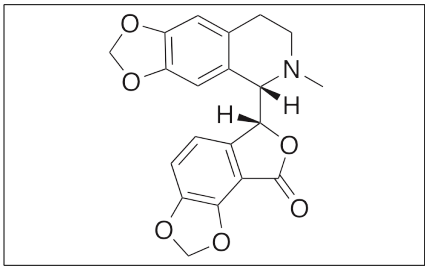
Product Information

Product ID B3211
CAS No. 485-49-4
Chemical Name

Synonym

Formula $C_{20}H_{17}NO_6$
Formula Wt. 367.35
Melting Point
Purity ≥98%
Solubility



Pricing and Availability

Bulk quanitites available upon request

Product ID	Size	List Price
B3211	25 mg	$57.10
B3211	100 mg	$107.00
B3211	500 mg	$392.40

Store Temp Ambient
Ship Temp Ambient

Description Bicuculline is a neuromodulatory GABA-A receptor antagonist used to study regional variation of GABA receptors and the role of GABA-A receptors in motor disorders, pain, seizure, nociception, anxiety, and memory. Through its inhibition of GABA-A receptors, bicuculline potentiates activation at NMDA receptors and produces membrane depolarization, inhibiting K+ conductance and prolonging Ca2+-dependent action potentials in neurons.

Specific rotation +130 (20 D, chloroform c=2)

References

Dela Peña IJ, Lee HL, Yoon SY, et al. The ethanol extract of Cirsium japonicum increased chloride ion influx through stimulating GABA(A) receptor in human neuroblastoma cells and exhibited anxiolytic-like effects in mice. Drug Discov Ther. 2013 Feb;7 (1):18-23. PMID: 23524939.

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Ionov ID, Roslavtseva LA. Coadministration of bicuculline and NMDA induces paraplegia in the rat. Brain Res. 2012 Apr 27;1451:27-33. PMID: 22445063

Ji G, Neugebauer V. Pain-related deactivation of medial prefrontal cortical neurons involves mGluR1 and GABA(A) receptors. J Neurophysiol. 2011 Nov;106(5):2642-52. PMID: 21880942.

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