LKT Laboratories, Inc.

(+)-Bicuculline

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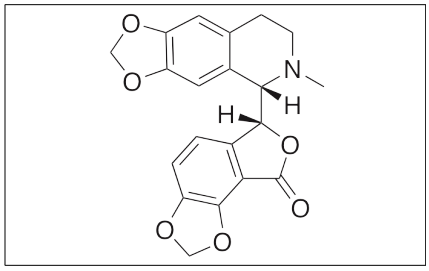
Product Information

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



Bulk quanitites available upon request

Product ID	Size
B3211	25 mg
B3211	100 mg
B3211	500 mg

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

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Torkaman-Boutorabi A, Soltani S, Oryan S, et al. Involvement of the dorsal hippocampal GABA-A receptors in histamine-induced facilitation of memory in the Morris water maze. Pharmacol Biochem Behav. 2013 Apr;105:142-50. PMID: 23438692.

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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Heyer EJ, Nowak LM, Macdonald RL. Membrane depolarization and prolongation of calcium-dependent action potentials of mouse neurons in cell culture by two convulsants: bicuculline and penicillin. Brain Res. 1982 Jan 28;232(1):41-56. PMID: 7055710.