



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC Handels GmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

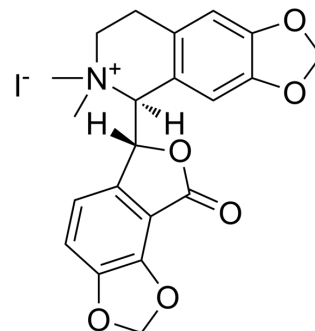
mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

Bicuculline methiodide

Cat. No.:	HY-103474
CAS No.:	40709-69-1
Molecular Formula:	C ₂₁ H ₂₀ INO ₆
Molecular Weight:	509.29
Target:	GABA Receptor
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling
Storage:	4°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 150 mg/mL (294.53 mM; Need ultrasonic)

	Solvent Concentration	Mass	1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM		1.9635 mL	9.8176 mL	19.6352 mL
	5 mM		0.3927 mL	1.9635 mL	3.9270 mL
	10 mM		0.1964 mL	0.9818 mL	1.9635 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Bicuculline methiodide is a potent GABA(A) receptors blocker. Bicuculline methiodide alters membrane properties and firing pattern. Bicuculline methiodide reduces the Apamin-sensitive afterhyperpolarization, while Apamin is a toxin isolated from bee venom to block small conductance Ca²⁺-activated K⁺ channels. Bicuculline methiodide facilitates burst firing via blocking apamin-sensitive Ca²⁺-activated K⁺ current^[1].

In Vitro

Bicuculline methiodide (30 μM) promotes N-methyl-D-aspartate (NMDA) stimulation to facilitate burst firing in dopamine neurons^[1]. Cluster discharges in the lateral habenular nucleus (LHb) of the antireward center are sufficient conditions for depression to occur. LHb neurons are usually classified into three types: silent, tonic-firing, burst-firing^[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Johnson SW, et al. Bicuculline methiodide potentiates NMDA-dependent burst firing in rat dopamine neurons by blocking apamin-sensitive Ca²⁺-activated K⁺ currents. *Neurosci Lett.* 1997 Aug 1;231(1):13-6.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA