



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 HandelsgmbH

Quellenstraße 110, A-1100 Wien

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

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

mail@szabo-scandic.com

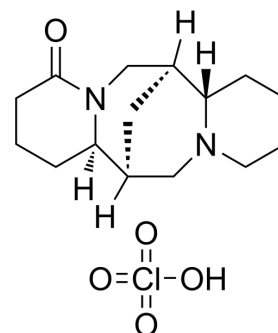
www.szabo-scandic.com

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



Lupanine perchlorate

Cat. No.:	HY-N3359A
CAS No.:	7400-11-5
Molecular Formula:	C ₁₅ H ₂₅ ClN ₂ O ₅
Molecular Weight:	348.82
Target:	nAChR
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Lupanine (D-Lupanine) perchlorate is a natural ketonic derivative of Sparteine ((+)-Sparteine (HY-W008350)) with a ganglioplegic activity. Lupanine perchlorate shows binding affinity for nicotinic receptor (nAChR) with a K _i value of 500 nM ^[1] .
IC ₅₀ & Target	Ki: 500 nM (Nicotinic receptor) and 11000 nM (Muscarinic receptor) ^[1]
In Vitro	Lupanine shows binding affinity for nicotinic receptor with a K _i value of 500 nM. While, Lupanine shows a very weak affinity for the muscarinic receptor with a K _i value of 11000 nM ^[1] . Lupanine (0-100 μM) is a weak agonist and desensitizer in SH-SY5Y cells, with EC ₅₀ and DC ₅₀ of 10.7 μM and 28.2 μM, respectively ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Lupanine (100-300 mg/kg for i.p.; 175-700 mg/kg for p.o.) is much less toxic in one single injection in EOPS male Swiss mice (20-22 g) and Hartley guinea-pigs (400-500 g) ^[1] . Lupanine (1-7.5 mg/kg; i.v.) is more efficient than Sparteine for antagonizing secondary reflex hypertension in carotid occlusion and hypotension resulting from the stimulation of the pneumogastric nerve in both the cat and the dog ^[1] . Lupanine has an inhibitory action on nicotinic type hypertension produced by injection of Acetylcholine (500 p.g/kg i.v.) in the Atropine-treated dog ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. K Yovo, et al. Comparative pharmacological study of sparteine and its ketonic derivative lupanine from seeds of *Lupinus albus*. *Planta Med.* 1984 Oct;50(5):420-4.
- [2]. Green BT, et al. Anagyrine desensitization of peripheral nicotinic acetylcholine receptors. A potential biomarker of quinolizidine alkaloid teratogenesis in cattle. *Res Vet Sci.* 2017 Dec;115:195-200.

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