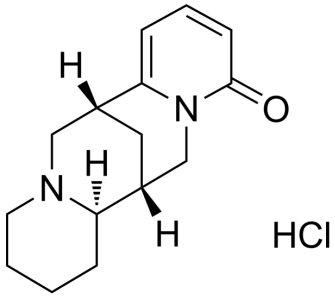
Anagyrine hydrochloride

Cat. No.:	HY-121027A
CAS No.:	74195-83-8
Molecular Formula:	$C_{15}H_{21}ClN_2O$
Molecular Weight:	280.79
Target:	nAChR; mAChR
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling; GPCR/G Protein
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Anagyrine ((-)-Anagyrine) hydrochloride is a quinolizidine alkaloid that has been found in Lupinus albus. Anagyrine hydrochloride binds to muscarinic and nicotinic acetylcholine receptors with IC_{50} values of 132 and 2096 μM respectively. Anagyrine hydrochloride is a potent and effective desensitizer of nAChR, and Anagyrine hydrochloride can directly, without metabolism, desensitize nAChR[1][2][3].
In Vitro	Anagyrine acts as a partial agonist in both cell lines with EC_{50} values of 4.2 and 231 μM in SH-SY5Y and TE-671 cells, respectively. Anagyrine is a desensitizer of nAChR with DC_{50} values of 6.9 and 139 μM in SH-SY5Y and TE-671 cells, respectively[3]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Schmeller T, et al. Binding of quinolizidine alkaloids to nicotinic and muscarinic acetylcholine receptors. J Nat Prod. 1994 Sep;57(9):1316-9.

[2]. Matsuda, K., et al. Nematicidal activities of (–)-N-methylcytisine and (–)-anagyrine from Sophora flavescens against pine wood nematodes. Agr. BioI. Chem. 53(8), 2287-2288 (1989).

[3]. 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.

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