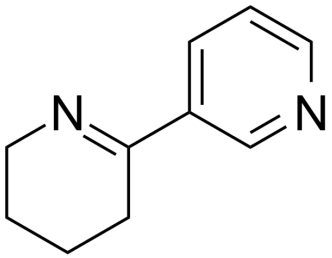
Anabaseine

Cat. No.:	HY-115766
CAS No.:	3471-05-4
Molecular Formula:	$C_{10}H_{12}N_2$
Molecular Weight:	160.22
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	Anabaseine is a non-selective nicotinic agonist. Anabaseine stimulates all AChRs, preferentially stimulates skeletal muscle and brain α7 subtypes[1][2]. Anabaseine is also a weak partial agonist at α4β2 nAChRs[3].
IC_{50} & Target	AChRs[1]
In Vitro	Anabaseine is a full agonist at α7 AChR in the central nervous system (CNS) and a full agonist at α1β1εδ and α1β1γδ (Torpedo) in the peripheral nervous system[1]. Anabaseine acts as neuromuscular agonist on the frog rectus abdominis muscle (EC_{50}: 0.25-0.74 μM)[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Anabaseine (3.6 μmol/kg; subcutaneous injection) elevates ACh levels[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Kem W, et al. The Nemertine Toxin Anabaseine and Its Derivative DMXBA (GTS-21): Chemical and Pharmacological Properties. Mar Drugs. 2006;4(3):255-273.

[2]. Summers KL et al. Nicotinic agonist modulation of neurotransmitter levels in the rat frontoparietal cortex. Jpn J Pharmacol. 1997 Jun;74(2):139-46.

[3]. Andrud K, et al. Investigation of the Possible Pharmacologically Active Forms of the Nicotinic Acetylcholine Receptor Agonist Anabaseine. Mar Drugs. 2019;17(11):614. Published 2019 Oct 29.

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