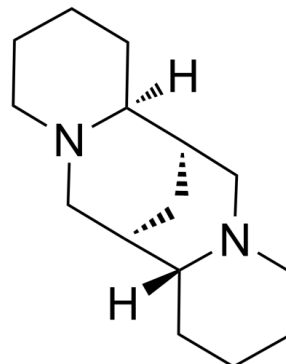


Data Sheet

Product Name:	(+)-Sparteine
Cat. No.:	CS-W008350
CAS No.:	492-08-0
Molecular Formula:	C ₁₅ H ₂₆ N ₂
Molecular Weight:	234.38
Target:	nAChR
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling
Solubility:	H ₂ O : 2.86 mg/mL (12.20 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

(+)-Sparteine is a natural alkaloid acting as a ganglionic blocking agent. (+)-Sparteine competitively blocks **nicotinic ACh receptor** in the neurons. IC₅₀ & Target: AChR^[1] *In Vitro*: (+)-Sparteine (2 μM) reduces the ACh-induced current caused by activation of nicotinic AChRs in a voltage-independent manner. (+)-Sparteine (5, 10 μM) reduces the amplitude of the excitatory postsynaptic current (EPSC) and the time constant of the EPSC decay^[1].

References:

[1]. Voitenko S, et al. Effect of (+)-sparteine on nicotinic acetylcholine receptors in the neurons of rat superior cervical ganglion. Mol Pharmacol. 1991 Aug;40(2):180-5.

CAIndexNames:

7,14-Methano-2H,6H-dipyrido[1,2-a:1',2'-e][1,5]diazocine, dodecahydro-, (7R,7aR,14R,14aS)-

SMILES:

[H][C@]12CCCCN1C[C@H]3C[C@@H]2CN4CCCC[C@@]34[H]

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

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