

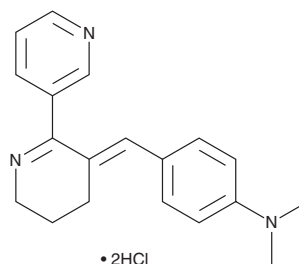
PRODUCT INFORMATION



DMAB-anabaseine (hydrochloride)

Item No. 42562

CAS Registry No.: 154149-38-9
Formal Name: 4-[(5,6-dihydro[2,3'-bipyridin]-3(4H)-ylidene)methyl]-N,N-dimethylbenzenamine, dihydrochloride
MF: $C_{19}H_{21}N_3 \cdot 2HCl$
FW: 364.3
Purity: $\geq 98\%$
Supplied as: A solid
Storage: $-20^{\circ}C$
Stability: ≥ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

DMAB-anabaseine (hydrochloride) is supplied as a solid. Aqueous solutions of DMAB-anabaseine (hydrochloride) can be prepared by directly dissolving the solid in aqueous buffers. DMAB-anabaseine (hydrochloride) is sparingly soluble (1-10 mg/ml) in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

Description

DMAB-anabaseine is a partial agonist of $\alpha 7$ nicotinic acetylcholine receptors (nAChRs).¹ It induces currents in a whole-cell patch-clamp assay using *Xenopus* oocytes expressing human $\alpha 7$ nAChRs ($EC_{50} = 21 \mu M$). Intracerebroventricular administration of DMAB-anabaseine (80 μg /animal) inhibits nicotine-induced prostration in rats.² It decreases prepulse inhibition deficits in sensory inhibition-deficient DBA/2J mice.³

References

1. Zwart, R., Strotton, M., Ching, J., *et al.* Unique pharmacology of heteromeric $\alpha 7 \beta 2$ nicotinic acetylcholine receptors expressed in *Xenopus laevis* oocytes. *Eur. J. Pharmacol.* **726**, 77-86 (2014).
2. Kem, W.R., Mahnir, V.M., Papke, R.L., *et al.* Anabaseine is a potent agonist on muscle and neuronal alpha-bungarotoxin-sensitive nicotinic receptors. *J. Pharmacol. Exp. Ther.* **283**(3), 979-992 (1997).
3. Stevens, K.E., Kem, W.R., Mahnir, V.M., *et al.* Selective $\alpha 7$ -nicotinic agonists normalize inhibition of auditory response in DBA mice. *Psychopharmacol. (Berl)* **136**(4), 320-327 (1998).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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