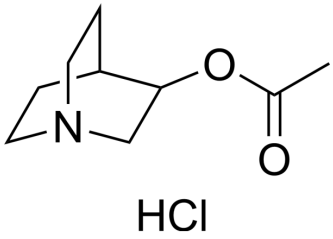
Aceclidine hydrochloride

Cat. No.:	HY-32067A
CAS No.:	6109-70-2
Molecular Formula:	$C_9H_{16}ClNO_2$
Molecular Weight:	205.68
Target:	mAChR
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



BIOLOGICAL ACTIVITY

Description	Aceclidine (Quinuclidin-3-yl acetate) hydrochloride is a modulator of M3 muscarinic acetylcholine receptor and a M1 receptor agonist (EC_{50}: 40 μM). Aceclidine hydrochloride is a cycloplegic agent, a surfactant, a tonicity adjustor and optionally a viscosity enhancer and an antioxidant. Aceclidine hydrochloride has the potential for the research of disorders such as refractive errors of the eye, xerostomia, Sjogren's syndrome, glaucoma, conjunctivitis, lacrimal gland disease, and esotropia[1][2][3].	
IC_{50} & Target	mAChR1	mAChR3
In Vivo	Aceclidine (1-10mg/kg, s.c.) hydrochloride reverses Hemicholinium-3 (HY-B2152) induces spatial learning and deficit in rats [4]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.	

REFERENCES

[1]. Gerald Horn, et al. Storage Stable Compositions and Methods for the Treatment of Refractive Errors of the Eye. Patent US20150290125A1.

[2]. Thomas G. Gant, et al. Imidazole modulators of muscarinic acetylcholine receptor m3. Patent US20110091459A1.

[3]. Cui Y, et al. Enhancement of memory function in aged mice by a novel derivative of xanomeline. Cell Res. 2008 Nov;18(11):1151-3.

[4]. Hagan JJ, et al. Hemicholinium-3 impairs spatial learning and the deficit is reversed by cholinomimetics. Psychopharmacology (Berl). 1989;98(3):347-56.

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