Methylbenactyzium Bromide

Cat. No.:	HY-B2070
CAS No.:	3166-62-9
Molecular Formula:	$C_{21}H_{28}BrNO_3$
Molecular Weight:	422.36
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)
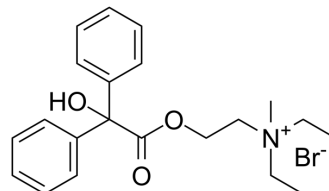
SOLVENT & SOLUBILITY

In Vitro	H_2O : 100 mg/mL (236.76 mM; Need ultrasonic)
	DMSO : 6 mg/mL (14.21 mM; Need ultrasonic and warming)

	Solvent Mass Concentration	1 mg	5 mg	10 mg
Preparing Stock Solutions	**1 mM**	2.3676 mL	11.8382 mL	23.6765 mL
	5 mM	0.4735 mL	2.3676 mL	4.7353 mL
	10 mM	0.2368 mL	1.1838 mL	2.3676 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description	Methylbenactyzium Bromide is a muscarinic acetylcholine receptor (mAChR) inhibitor.
IC$_{50}$ & Target	mAChR[1]
In Vitro	Methylbenactyzium Bromide is a muscarinic acetylcholine receptor (mAChR) inhibitor[1]. Methylbenactyzium bromide has been used as a spasmolytic for the treatment of gastrointestinal ulcer[2].
	MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Bhattacharjee AK, et al. Discovery of subtype selective muscarinic receptor antagonists as alternatives to atropine using in silico pharmacophore modeling and virtual screening methods. Bioorg Med Chem. 2013 May 1;21(9):2651-62.

[2]. Nishikawa M, et al. Analysis of methylbenactyzium bromide in human urine by thin-layer chromatography and pyrolysis gas chromatography. Forensic Sci Int. 1991

Mar;49(2):197-203.

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