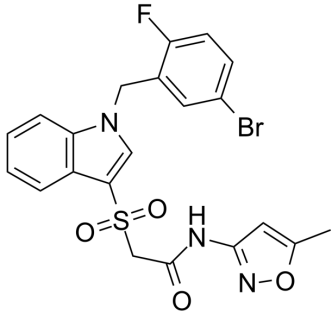
ML169

Cat. No.:	HY-120576
CAS No.:	1222878-02-5
Molecular Formula:	$C_{21}H_{17}BrFN_3O_4S$
Molecular Weight:	506.34
Target:	mAChR
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	ML169 (VU0405652) is a potent, selective and brain penetrant positive allosteric modulator (PAM) of M_1 mAChR, with an EC_{50} of 1.38 μM. ML169 is a MLPCN probe and can be used for Alzheimer's disease[1].
IC_{50} & Target	EC_{50}: 1.38 μM (M1 mAChR)[1]
In Vitro	ML169 (VU0405652) is selective versus the biogenic amines (D2, H-HT2B, etc...) and displays no orthosteric binding at M_1–M_5 [1]. ML169 shifts APP processing towards a non-amyloidogenic pathway[1]. ML169 (2 μM) potentiates the carbachol (CCh)-mediated non-amyloidogenic APPsa release to the same degree as 10 μM CCh [1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	ML169 (VU0405652) (10 mg/kg; i.p.) affords a $brain_{AUC}/plasma_{AUC}$ of 0.32 at 1 h in rats[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Reid PR, et al. Discovery and optimization of a novel, selective and brain penetrant M1 positive allosteric modulator (PAM): the development of ML169, an MLPCN probe. Bioorg Med Chem Lett. 2011 May 1;21(9):2697-701.

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