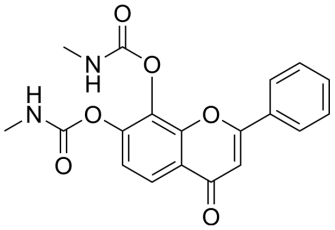
TrkB-IN-1

Cat. No.:	HY-153189
CAS No.:	1609067-49-3
Molecular Formula:	$C_{19}H_{16}N_2O_6$
Molecular Weight:	368.34
Target:	Trk Receptor
Pathway:	Neuronal Signaling; Protein Tyrosine Kinase/RTK
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	TrkB-IN-1 is a potent and orally active TrkB agonist and has favorable PK properties. TrkB-IN-1 reverses the cognitive defects in an AD mouse model and can be used for alzheimer's disease research[1].
IC_{50} & Target	TrkB
In Vivo	TrkB-IN-1 (oral gavage; 7.25 mg/kg, 21.8 mg/kg, 43.6 mg/kg; 3 month) activates TrkB signaling cascade in the hippocampus of 5XFAD mice in a dose-dependent manner in 5XFAD mice, the ratio of p-TrkB/TrkB, p-Akt/Akt and p-ERK/ERK is also increased[1]. TrkB-IN-1 (oral gavage; 7.25 mg/kg, 21.8 mg/kg, 43.6 mg/kg; 5 days) alleviates Aβ deposition and rescues memory deficits in 5XFAD mice[1]. TrkB-IN-1 (oral gavage; 36 mg/kg) exhibits -10.5% oral bioavailability with a C_{max} of 129 ng/mL, T_{max} of 0.5 h, and $T_{1/2}$ for oral administration of 3.66 h[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Chun Chen, et al. The prodrug of 7,8-dihydroxyflavone development and therapeutic efficacy for treating Alzheimer's disease. Proc Natl Acad Sci U S A. 2018 Jan 16;115(3):578-583.

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