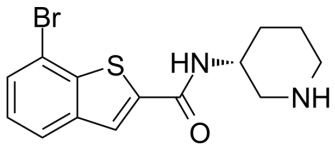
Br-PBTC

Cat. No.:	HY-103066
CAS No.:	1839519-57-1
Molecular Formula:	$C_{14}H_{15}BrN_2OS$
Molecular Weight:	339.25
Target:	nAChR
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Br-PBTC is a potent, 2/4 subtype-selective positive allosteric modulator of nAChRs (nicotinic acetylcholine receptors) with α2β2α2β4α4β2α4β4(α4β2)$_2$α4 and (α4β2)$_2$β2 EC_{50} ranges from 0.1~0.6 μM. Br-PBTC acts from the c-tail of an α subunit[1].
IC_{50} & Target	nAChRs[1]
In Vitro	Br-PBTC (0.01~10 μM; HEK cells) selectively affects 2 and 4 subunits. Br-PBTC (3 μM; oocytes) has greater effects on nAChRs with 2 subunits over those with 4 subunits. Br-PBTC (0.01~10 μM; 15 minutes; HEK cells) can increase channel activation by a maximal concentration of ACh. Br-PBTC (3 μM; 50 seconds; oocytes) increased ACh activation of α4β2 nAChRs by 385± 61 %. Br-PBTC (3 μMoocytes) reactivates short term desensitized nAChRs expressed. Br-PBTC (3 μM; 500 seconds; HEK cells) reactivates short term desensitized (α4β2)$_2$α4 and(α4β2)$_2$β2 nAChRs expressed. Br-PBTC (0.1~100 μM0~140 seconds; HEK cells) reactivates long term desensitized nAChRs[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Wang J, et al. A Novel α2/α4 Subtype-selective Positive Allosteric Modulator of Nicotinic Acetylcholine Receptors Acting from the C-tail of an α Subunit. J Biol Chem. 2015;290(48):28834-28846.

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