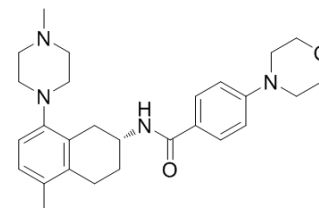


AR-A 2

Cat. No.:	HY-107018
CAS No.:	220051-79-6
Molecular Formula:	C ₂₇ H ₃₆ N ₄ O ₂
Molecular Weight:	448.6
Target:	5-HT Receptor
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	AR-A 2 is a selective 5-HT _{1B} receptor antagonist, with high affinity to guinea pig cortex 5HT _{1B/1D} and recombinant guinea pig 5-HT _{1B} receptors (K _i =0.24 and 0.47 nM) and with 10-fold lower affinity to guinea pig 5-HT _{1D} receptor (K _i , 5 nM), and shows an EC ₅₀ of 4.5 nM for the guinea pig 5-HT _{1B} receptor; AR-A 2 can be used in the research of depression and anxiety.		
IC₅₀ & Target	5-HT _{1B/D} Receptor 20 nM (K _i)	5-HT _{2A} Receptor 339 nM (K _i)	5-HT _{1A} Receptor 3070 nM (K _i)
In Vitro	AR-A 2 (AR-A000002) is a selective 5-HT _{1B} receptor antagonist, with high affinity to guinea pig cortex 5HT _{1B/1D} and recombinant guinea pig 5-HT _{1B} receptors (K _i =0.24 and 0.47 nM) and with 10-fold lower affinity to guinea pig 5-HT _{1D} receptors (K _i , 5 nM), and shows an EC ₅₀ of 4.5 nM for the guinea pig 5-HT _{1B} receptor. AR-A 2 also binds to the rat cortical 5HT _{1B/1D} receptor (K _i , 20 nM), rat cortex 5-HT _{2A} receptor (K _i , 339 nM), rat hippocampus 5-HT _{1A} receptor (K _i , 3070 nM). In addition, AR-A 2 also exhibits affinity for dopamine D2 (K _i , 330 nM) and α1-adrenoceptors (K _i , 490 nM) ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.		

REFERENCES

[1]. Ahlgren C, et al. In vitro characterization of AR-A000002, a novel 5-hydroxytryptamine(1B) autoreceptor antagonist. Eur J Pharmacol. 2004 Sep 19;499(1-2):67-75.

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

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