

Product Data Sheet

AR-A2

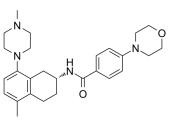
Cat. No.: HY-107018 CAS No.: 220051-79-6 Molecular Formula: $C_{27}H_{36}N_4O_2$ Molecular Weight: 448.6

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 5 HT $_{1B/1D}$ 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.		
IC ₅₀ & Target	5-HT _{1B/D} Receptor 20 nM (Ki)	5-HT _{2A} Receptor 339 nM (Ki)	5-HT _{1A} Receptor 3070 nM (Ki)
In Vitro	AR-A 2 (AR-A000002) is a selective 5-HT $_{1B}$ receptor antagonist, with high affinity to guinea pig cortex 5 HT $_{1B/1D}$ 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 5 HT $_{1B/1D}$ 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 α 1-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.

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