
Product Data Sheet

Product Name: AR-A 2 (AR-A 000002)

Cat. No.: GC31291

Chemical Properties

Cas. No. 220051-79-6

SMILES CC1=CC=C(N2CCN(C)CC2)C3=C1CC[C@@H](NC(C4=CC=C(N5CCOCC5)C=C4)=O)C3Formula C₂₇H₃₆N₄O₂ M.Wt 448.6

Solubility Soluble in DMSO Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure **Background**

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 EC₅₀ 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.

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 EC₅₀ 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].

[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-

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

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2):67-75.

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