Product Data Sheet

BMY 7378

Cat. No.: HY-100554
CAS No.: 21102-95-4
Molecular Formula: $C_{22}H_{33}Cl_2N_3O_3$

Molecular Weight: 458.42

Target: Adrenergic Receptor; 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	BMY 7378 is a selective antagonist of α_{1D} -adrenoceptor (α_{1D} -AR). BMY 7378 binds to membranes expressing the cloned rat α_{1D} -AR with a >100-fold higher affinity (K_i =2 nM) than binding to either the cloned rat α_{1A} -AR (K_i =800 nM) or the hamster α_{1B} -AR (K_i =600 nM). BMY 7378 is a 5-HT _{1A} receptor partial agonist ^{[1][2]} .			
IC ₅₀ & Target	rat α_{1A} -adrenergic receptor 800 nM (Ki)	hamster alpha _{1B} - adrenergic receptor 600 nM (Ki)	rat alpha _{1D} -adrenergic receptor 2 nM (Ki)	5-HT _{1A} Receptor
In Vitro	BMY 7378 is selective for the alpha 1D-adrenoceptor subtype (pK _i : hamster alpha 1b-adrenoceptor 6.2, human alpha 1b-adrenoceptor 7.2; bovine alpha 1c-adrenoceptor 6.1, human alpha 1c-adrenoceptor 6.6; rat alpha 1d-adrenoceptor 8.2, human alpha 1d-adrenoceptor 9.4) and has high affinity (pA ₂ , 8.9) for rat aorta alpha 1-adrenoceptor [2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.			

REFERENCES

[1]. Piascik MT, et al. The specific contribution of the novel alpha-1D adrenoceptor to the contraction of vascular smooth muscle. J Pharmacol Exp Ther. 1995;275(3):1583-1589.

[2]. Goetz AS, et al. BMY 7378 is a selective antagonist of the D subtype of alpha 1-adrenoceptors. Eur J Pharmacol. 1995;272(2-3):R5-R6.

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