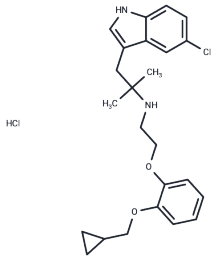
Data Sheet (Cat.No.T16798)

TargetMol

RS 17053 hydrochloride

Chemical Properties



CAS No. : 169505-93-5

Formula: C24H30Cl2N2O2

Molecular Weight: 449.41

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	RS 17053 hydrochloride is a potent and selective antagonist of the α1A adrenoceptor, with a pKi value of 9.1 in native cell membranes and a pA2 value of 9.8 in functional assays.
Targets(IC50)	Adrenergic Receptor
In vitro	RS 17053 hydrochloride antagonizes responses to NE only at high concentrations in isolated smooth muscle preparations from human LUT tissues. RS 17053 hydrochloride displays a high affinity for the α1A-adrenoceptor (pKi and pA2 estimates of 9.1-9.9) and a 30-100-fold selectivity over the α1 B and the α1 D-adrenoceptor subtypes (pKi and pA2 estimates of 7.7-7.8) in several tissues from rat and cloned adrenoceptors [1].
In vivo	RS 17053 hydrochloride exhibits a rapid onset and a duration of action exceeding 60 minutes. At a dosage of 10 mg/kg, RS-17053 significantly suppresses food intake and its pretreatment notably alters food intake [$F(4, 132) = 6.28$, $p < 0.0001$] [2].

Solubility Information

Solubility	DMSO: 125 mg/mL (278.14 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 4 mg/mL (8.9 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2251 mL	11.1257 mL	22.2514 mL
5 mM	0.445 mL	2.2251 mL	4.4503 mL
10 mM	0.2225 mL	1.1126 mL	2.2251 mL
50 mM	0.0445 mL	0.2225 mL	0.445 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Ford AP, et al. RS-17053 (N-[2-(2-cyclopropylmethoxyphenoxy)ethyl]-5-chloro-alpha, alpha-dimethyl-1H-indole-3-ethanamine hydrochloride), a selective alpha 1A-adrenoceptor antagonist, displays low affinity for functional alpha 1-adrenoceptors in human prostate: implications for adrenoceptor classification. Mol Pharmacol. 1996 Feb; 49(2):209-15.

Wellman PJ, et al. Effects of the alpha 1a-adrenoceptor antagonist RS-17053 on phenylpropanolamine-induced anorexia in rats. Pharmacol Biochem Behav. 1997 May-Jun;57(1-2):281-4.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481