RS100329 hydrochloride

Cat. No.: HY-103204

CAS No.: 1215654-26-4

Molecular Formula: $C_{20}H_{26}ClF_3N_4O_3$

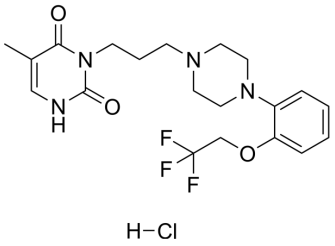
Molecular Weight: 462.89

Target: Adrenergic Receptor

Pathway: GPCR/G Protein; Neuronal Signaling

Storage: 4°C, protect from light

* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 31.25 mg/mL (67.51 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	2.1603 mL	10.8017 mL	21.6034 mL
	5 mM	0.4321 mL	2.1603 mL	4.3207 mL
	10 mM	0.2160 mL	1.0802 mL	2.1603 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

RS100329 hydrochloride is a potent and selective α1A-adrenoceptor antagonist with pK_i values of 9.6, 7.9 and 7.5 for α1A, α1D, and α1B, respectively. RS100329 hydrochloride inhibits reflex urethral contractions. RS100329 hydrochloride can be used in research of benign prostatic hyperplasia[1][2].

IC_{50} & Target

pKi: 9.6 (α1A-adrenoceptor), 7.9 (α1D-adrenoceptor) and 7.5 (α1B-adrenoceptor)[2]

In Vitro

RS100329 hydrochloride (human lower urinary tract (LUT) tissues) contractions to Norepinephrine (HY-13715) is antagonized in a surmountable and concentration-dependent manner[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

RS100329 hydrochloride (0.01-0.1 mg/kg; i.v.; Sprague Dawley rats) reduces baseline urethral pressure and inhibit reflex urethral contractions[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Sprague Dawley rats (300-390 g)[1]

Dosage:	0.01-0.1 mg/kg
Administration:	Intravenous injection
Result:	Caused a fall in baseline urethral pressure reaching a maximum of 23%.

REFERENCES

[1]. Conley RK, et, al. The role of alpha(1)-adrenoceptors and 5-HT(1A) receptors in the control of the micturition reflex in male anaesthetized rats. Br J Pharmacol. 2001 May;133(1):61-72.

[2]. Williams TJ, et, al. In vitro alpha1-adrenoceptor pharmacology of Ro 70-0004 and RS-100329, novel alpha1A-adrenoceptor selective antagonists. Br J Pharmacol. 1999 May;127(1):252-8.

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