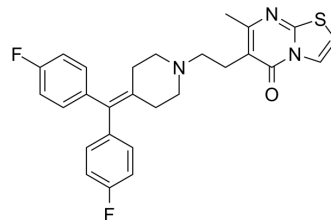


Ritanserin

Cat. No.:	HY-10791
CAS No.:	87051-43-2
Molecular Formula:	C ₂₇ H ₂₅ F ₂ N ₃ OS
Molecular Weight:	477.57
Target:	5-HT Receptor; Histamine Receptor; Dopamine Receptor; Adrenergic Receptor
Pathway:	GPCR/G Protein; Neuronal Signaling; Immunology/Inflammation
Storage:	-20°C, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 25 mg/mL (52.35 mM; Need ultrasonic)					
	H ₂ O : < 0.1 mg/mL (ultrasonic;warming;heat to 60°C) (insoluble)					
	Preparing Stock Solutions	Solvent	Mass	1 mg	5 mg	10 mg
		Concentration				
		1 mM		2.0939 mL	10.4697 mL	20.9393 mL
5 mM			0.4188 mL	2.0939 mL	4.1879 mL	
	10 mM		0.2094 mL	1.0470 mL	2.0939 mL	
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (5.23 mM); Clear solution 2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (4.36 mM); Clear solution					

BIOLOGICAL ACTIVITY

Description	Ritanserin (R 55667) is a highly potent, relatively selective, orally active, long acting antagonist of 5-HT ₂ receptor, with an IC ₅₀ of 0.9 nM, less active on Histamine H ₁ , Dopamine D ₂ , Adrenergic α ₁ , Adrenergic α ₂ receptors ^[1] .			
IC₅₀ & Target	5-HT ₂ Receptor 0.9 nM (IC ₅₀)	H ₁ Receptor 35 nM (IC ₅₀)	D ₂ Receptor 70 nM (IC ₅₀)	Adrenergic α ₁ 97 nM (IC ₅₀)
	Adrenergic α ₂ 150 nM (IC ₅₀)			
In Vitro	Ritanserin (R 55667) is a highly potent, relatively selective, long acting antagonist of 5-HT ₂ receptor, with an IC ₅₀ of 0.9 nM,			

less active on Histamine-H₁ (IC₅₀, 35 nM), Dopamine-D₂ (IC₅₀, 70 nM), Adrenergic-α₁ (IC₅₀, 97 nM), Adrenergic-α₂ receptor (IC₅₀, 150 nM)^[1].

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

CUSTOMER VALIDATION

- Prog Neuropsychopharmacol Biol Psychiatry. 2022 Nov 30;110689.
- Thorac Cancer. 2023 Mar 25.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Leysen JE, et al. Receptor-binding properties in vitro and in vivo of ritanserin: A very potent and long acting serotonin-S₂ antagonist. Mol Pharmacol. 1985 Jun;27(6):600-11.

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