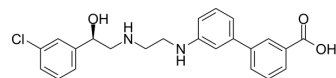


Solabegron

Cat. No.:	HY-19436
CAS No.:	252920-94-8
Molecular Formula:	C ₂₃ H ₂₃ ClN ₂ O ₃
Molecular Weight:	410.89
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 : ≥ 33.33 mg/mL (81.12 mM)					
	* "≥" means soluble, but saturation unknown.					
	Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg
			1 mM	2.4337 mL	12.1687 mL	24.3374 mL
			5 mM	0.4867 mL	2.4337 mL	4.8675 mL
10 mM			0.2434 mL	1.2169 mL	2.4337 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: ≥ 2.17 mg/mL (5.28 mM); Clear solution					
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.17 mg/mL (5.28 mM); Clear solution					
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.17 mg/mL (5.28 mM); Clear solution					

BIOLOGICAL ACTIVITY

Description	Solabegron (GW 427353) is a selective β ₃ -adrenergic receptor agonist, stimulating cAMP accumulation in Chinese hamster ovary cells expressing the human β ₃ -AR, with an EC ₅₀ value of 22 nM ^[1] . Solabegron (GW 427353) is being developed for the treatment of overactive bladder and irritable bowel syndrome ^[1] .
IC ₅₀ & Target	EC ₅₀ : 22 nM (β ₃ -AR in cells) ^[1] .
In Vivo	Solabegron (GW427353) at 3 mg/kg i.v. evokes an increase in micturition volume threshold that prevented the acetic acid-evoked decreases in dogs. The low dose (1 mg/kg) shows no significant activity ^[1] .

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

Animal Model:	Adult female beagle dogs (6-10 kg) ^[1] .
Dosage:	1, 3 mg/kg.
Administration:	I.V. once.
Result:	Dosage of 3 mg/kg evoked an increase in micturition volume threshold.

REFERENCES

[1]. Hicks A, et al. GW427353 (solabegron), a novel, selective beta3-adrenergic receptor agonist, evokes bladder relaxation and increases micturition reflex threshold in the dog. J Pharmacol Exp Ther. 2007 Oct;323(1):202-9.

[2]. Andersson KE, et al. Selective β 3-adrenoceptor agonists for the treatment of overactive bladder. J Urol. 2013 Oct;190(4):1173-80.

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

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