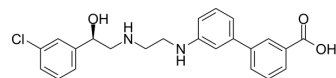


Solabegron

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.																							
	<table border="1"> <thead> <tr> <th rowspan="2">Solvent Concentration</th> <th>Mass</th> <th>1 mg</th> <th>5 mg</th> <th>10 mg</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td rowspan="3">Preparing Stock Solutions</td> <td>1 mM</td> <td>2.4337 mL</td> <td>12.1687 mL</td> <td>24.3374 mL</td> </tr> <tr> <td>5 mM</td> <td>0.4867 mL</td> <td>2.4337 mL</td> <td>4.8675 mL</td> </tr> <tr> <td>10 mM</td> <td>0.2434 mL</td> <td>1.2169 mL</td> <td>2.4337 mL</td> </tr> </tbody> </table>	Solvent Concentration	Mass	1 mg	5 mg	10 mg						Preparing Stock Solutions	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
	Solvent Concentration		Mass	1 mg	5 mg	10 mg																		
	Preparing Stock Solutions	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	<ol style="list-style-type: none"> 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 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 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] .
IC₅₀ & 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.

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