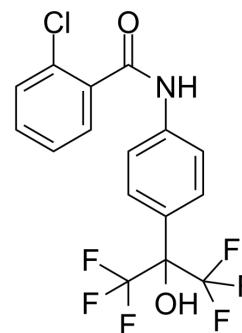


SR0987

Cat. No.:	HY-101454		
CAS No.:	303126-97-8		
Molecular Formula:	C ₁₆ H ₁₀ ClF ₆ NO ₂		
Molecular Weight:	397.7		
Target:	ROR		
Pathway:	Metabolic Enzyme/Protease; Vitamin D Related/Nuclear Receptor		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 150 mg/mL (377.17 mM)
 H₂O : < 0.1 mg/mL (insoluble)
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.5145 mL	12.5723 mL	25.1446 mL
	5 mM	0.5029 mL	2.5145 mL	5.0289 mL
	10 mM	0.2514 mL	1.2572 mL	2.5145 mL

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

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 2.5 mg/mL (6.29 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.5 mg/mL (6.29 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.5 mg/mL (6.29 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

SR0987, a SR1078 analog, is a ROR γ t agonist, with an EC₅₀ of 800 nM. SR0987 increases IL17 expression while repressing the expression of PD-1^[1].

IC₅₀ & Target

EC₅₀: 800 nM (ROR γ t)^[1].

In Vitro

SR0987 clearly shows a concentration dependent induction of reporter gene expression with an EC₅₀ of ~800nM. SR0987 treatment results in a statistically significant reduction of the surface expression of PD-1 whereas desmostrol treatment shows no effect. Treatment with SR0987 and or desmosterol results in a trend towards increased IL17 production^[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Sci Adv. 2021 Jan 22;7(4):eabe4827.
- World J Emerg Med. 2022;13(1):32-37.

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REFERENCES

[1]. Chang MR, et al. Synthetic ROR γ t Agonists Enhance Protective Immunity. ACS Chem Biol. 2016 Apr 15;11(4):1012-8.

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