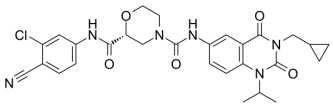
RORγt Inverse agonist 6

Cat. No.:	HY-130243
CAS No.:	1887161-80-9
Molecular Formula:	$C_{28}H_{29}ClN_6O_5$
Molecular Weight:	565.02
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 6 months -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 50 mg/mL (88.49 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	1.7698 mL	8.8492 mL	17.6985 mL
	5 mM	0.3540 mL	1.7698 mL	3.5397 mL
	10 mM	0.1770 mL	0.8849 mL	1.7698 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 (4.42 mM); Suspended solution; Need ultrasonic
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: 2.5 mg/mL (4.42 mM); Suspended solution; Need ultrasonic
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (4.42 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

RORγt Inverse agonist 6 (compound 43) is a RORγt inverse agonist for the study of Th17-driven autoimmune diseases. RORγt Inverse agonist 6 (compound 43) suppresses IL-17A gene expression by IL-23 stimulation in vivo[1].

In Vivo

RORγt Inverse agonist 6 (compound 43) suppresses IL-17A gene expression by IL-23 stimulation in a mouse pharmacodynamics model[1].
RORγt Inverse agonist 6 (compound 43) exhibits improved drug exposure (mouse AUC: 1289 ng•h/mL at 1 mg/kg, po)[1].
RORγt Inverse agonist 6 (compound 43, 30 mg/kg, po, b.i.d) inhibits the expression level of IL-17A by 59% compared to the

vehicle after the oral administration at the tested dose[1].

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

Animal Model:	Mice[1].
Dosage:	30 mg/kg.
Administration:	Orally twice: at 30 min before and 8 h after IL-23 administration.
Result:	Inhibited the expression level of IL-17A by 59% compared to the vehicle after the oral administration at the tested dose.

REFERENCES

[1]. Sato A, et al. Design and Synthesis of Conformationally Constrained RORγt Inverse Agonists. ChemMedChem. 2019 Oct 28.

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

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