# SR11237

Cat. No.: HY-107413 CAS No.: 146670-40-8 Molecular Formula:  $C_{24}^{}H_{28}^{}O_{4}^{}$ Molecular Weight: 380.48

Target: RAR/RXR

Pathway: Metabolic Enzyme/Protease

Storage: Powder -20°C 3 years

> 4°C 2 years

-80°C In solvent 6 months

> -20°C 1 month

**Product** Data Sheet

## **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 5 mg/mL (13.14 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.6283 mL	13.1413 mL	26.2826 mL
	5 mM	0.5257 mL	2.6283 mL	5.2565 mL
	10 mM	0.2628 mL	1.3141 mL	2.6283 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 0.5 mg/mL (1.31 mM); Clear solution

### **BIOLOGICAL ACTIVITY**

Description	SR11237 (BMS-649) is a potent retinoid X receptor (RXR)-selective agonist that is devoid of any RAR activity. SR11237 can cause RXR/RXR homodimers to form and transactivate a reporter gene containing a RXR-response element $^{[1][2][3]}$ .
In Vitro	Using nuclear receptor co-transfection assays in COS-1 cells, that SR11237 is effective at transactivating a chloramphenicol acetyltransferase reporter gene through RXRs but not retinoic acid receptors <sup>[1]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	SR11237 (BMS-649) (25 mg/kg; i.p.; daily from post-natal days 5 to 15) causes irregular ossification and premature closure of the growth plate <sup>[2]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Sprague-Dawley rats <sup>[2]</sup>	
Dosage:	25 mg/kg	
Administration:	I.p.; daily from post-natal days 5 to 15	
Result:	Caused disturbed ossification and bone morphology in rats, including premature growth plate closure and infiltration of ossified tissue through the central epiphysis.	

### **REFERENCES**

- [1]. Gendimenico GJ, et al. A pleiotropic response is induced in F9 embryonal carcinoma cells and rhino mouse skin by All-trans-retinoic acid, a RAR agonist but not by SR11237, a RXR-selective agonist. J Invest Dermatol. 1994;102(5):676-680.
- [2]. Dupuis H, et al. Exposure to the RXR Agonist SR11237 in Early Life Causes Disturbed Skeletal Morphogenesis in a Rat Model. Int J Mol Sci. 2019;20(20):5198. Published 2019 Oct 20.
- [3]. H.L. Dupuis. The RXR agonist SR-11237 affects skeletal development. ABSTRACT ONLY| VOLUME 24, SUPPLEMENT 1, S147, APRIL 01, 2016.

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

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