Product Data Sheet

MRT-14

Cat. No.: HY-145918

CAS No.: 1263131-83-4

Molecular Formula: $C_{24}H_{24}N_4O_5$ Molecular Weight: 448.47

Target: Smo

Pathway: Stem Cell/Wnt

Storage: 4°C, protect from light

* In solvent: -80°C, 6 months; -20°C, 1 month (protect from light)

SOLVENT & SOLUBILITY

In Vitro

DMSO: 100 mg/mL (222.98 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.2298 mL	11.1490 mL	22.2980 mL
	5 mM	0.4460 mL	2.2298 mL	4.4596 mL
	10 mM	0.2230 mL	1.1149 mL	2.2298 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 (5.57 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (5.57 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

MRT-14 is a potent antagonist of Smo. Smo is the major component involved in signal transduction of the Hedgehog (Hh) morphogens. MRT-14 has the potential for the research of several types of cancers linked to abnormal Hh signaling $^{[1]}$.

REFERENCES

[1]. Manetti F, et al. Virtual screening-based discovery and mechanistic characterization of the acylthiourea MRT-10 family as smoothened antagonists. Mol Pharmacol. 2010;78(4):658-665.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

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