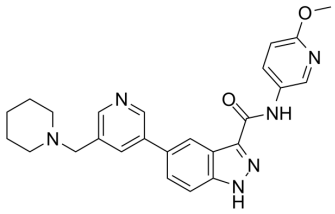
Teplinovivint

Cat. No.:	HY-137454
CAS No.:	1428064-91-8
Molecular Formula:	$C_{25}H_{26}N_6O_2$
Molecular Weight:	442.51
Target:	Wnt; β-catenin
Pathway:	Stem Cell/Wnt
Storage:	Powder -20°C 3 years In solvent -80°C 6 months -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 83.33 mg/mL (188.31 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	2.2598 mL	11.2992 mL	22.5984 mL
	5 mM	0.4520 mL	2.2598 mL	4.5197 mL
	10 mM	0.2260 mL	1.1299 mL	2.2598 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: ≥ 2.08 mg/mL (4.70 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: 2.08 mg/mL (4.70 mM); Suspended solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

Teplinovivint is a potent wnt/β-catenin signaling pathway inhibitor. Teplinovivint has anti-inflammatory activity and has the potential for tendinopathy research[1].

IC_{50} & Target

Wnt

In Vitro

Teplinovivint (compound 175; 0.0003-10 μM) inhibits Wnt/p-catenin activity in human colorectal cancecell line (SW480) in a dose-dependent manner (EC_{50}=152.9 nM)[1].
Teplinovivint inhibits SW480 cells (EC_{50}=25 nM) and primary human mesenchymal stem cells (hMSCs; EC_{50}=10.377 μM)[1].
Teplinovivint (5.8, 10.8, 21.7, 41.7, 83.3, 166.6, 333.3, 750 nM) induced the expression of SCXA, TenacinC and Tenomodulin, in a dose-dependent manner with an EC_{50} between 139-189 nM[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo	Teplinovivint (compound 175; 10 mg/ml; once daily for 21 days via topical application) causes amelioration of inflammation as well as tendon degeneration. Teplinovivint results in a decrease of aninflammatory plasma biomarker, KC/GRO in the Collagenase-induced Tendon Injury Model[1]. Teplinovivint (1 mg/ml with 1% BA) has a T_{max} of 1 hours in plasma[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Vishal DESHMUKH, et al. Methods of using indazole-3-carboxamides and their use as wnt/b-catenin signaling pathway inhibitors. WO2018075858A1.

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