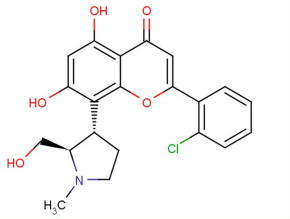
Data Sheet (Cat.No.T12737)

TargetMol
A DRUG SCREENING EXPERT

Riviciclib

Chemical Properties



CAS No.:	920113-02-6
Formula:	C21H20ClNO5
Molecular Weight:	401.84
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	Riviciclib is a potent inhibitor of cyclin-dependent kinase (CDK)(CDK9-cyclinT1, CDK4-cyclin D1, and CDK1-cyclinB with IC50s of 20 nM, 63 nM, and 79 nM, respectively),with antitumor activity on cisplatin-resistant cells.
Targets(IC_{50})	CDK9- Cyclin T1: 0.020 μM cdk4-cyclin D1: 0.063 μM CDK1-Cyclin B: 0.079 μM cdk2-cyclin A: 0.224 μM cdk2-cyclin E: 2.540 μM cdk6-cyclin D3: 0.396 μM CDK9-cyclin H: 2.900 μM
In vitro	Riviciclib (3-24 hours; 1.5 μM) reduces cyclin D1, Cdk4, and Rb levels in H-460 cells. Rb (retinoblastoma) phosphorylation at Ser780 decrease at 3 h. Riviciclib shows activity in human cancer cell lines, such as colon carcinoma, osteosarcomal, cervical carcinoma, and bladder carcinoma cells[2].Riviciclib shows no detectable cells in G1 and G2 in promyelocytic leukemia cells and arrest of cells in G1 in synchronized human non-small cell lung carcinoma (H-460) and human normal lung fibroblast (WI-38) cells[3].
In vivo	Riviciclib in human xenograft mode with severe combined immunodeficient mice shows significant inhibition in the growth of human colon carcinoma HCT-116 xenograft[3].

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.489 mL	12.443 mL	24.886 mL
5 mM	0.498 mL	2.489 mL	4.977 mL
10 mM	0.249 mL	1.244 mL	2.489 mL
50 mM	0.05 mL	0.249 mL	0.498 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

1. Roskoski R Jr,Cyclin-dependent protein kinase inhibitors including palbociclib as anticancer drugs.Pharmacol Res. 2016 May;107:249-275.

2. Joshi KS, et al. In vitro antitumor properties of a novel cyclin-dependent kinase inhibitor, P276-00. Mol Cancer Ther. 2007 Mar;6(3):918-25.

3. Joshi KS,et al. P276-00, a novel cyclin-dependent inhibitor induces G1-G2 arrest, shows antitumor activity on cisplatin-resistant cells and significant in vivo efficacy in tumor models. Mol Cancer Ther. 2007 Mar;6(3):926-34.

Tel:781-999-4286 E-mail:info@targetmol.com Address:36 Washington Street,Wellesley Hills,MA 02481