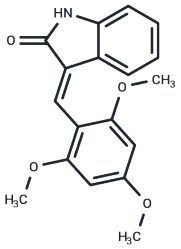
Data Sheet (Cat.No.T2440)

TargetMol

IC261

Chemical Properties



CAS No. : 186611-52-9

Formula: C18H17NO4

Molecular Weight: 311.33

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	IC261 (SU-5607) is a novel inhibitor of CK1, triggers the mitotic checkpoint control. The IC50 of IC261 for CK1 was 16 μM and for Cdk5 is 4.5 mM.
Targets(IC50)	Apoptosis,Casein Kinase,CDK
In vitro	IC261 leads to a p53-dependent arrest of the cells with a DNA content of 4 N. It can produce effects on cell cycle progression that are indistinguishable from an established spindle poison and are dependent on the p53 status of the cells[1].
In vivo	Intrathecal injection of a CK1 inhibitor IC261 attenuates neuropathic pain behaviors. CK1 inhibitors are found to be effective in reducing spinal excitatory response elicited by the presynaptic electrical stimulation only in neuropathic mice[2]. Targeting CK1 isoforms by IC261 influences both pancreatic tumour cell growth and apoptosis sensitivity in vitro and the growth of induced tumours in vivo[3].
Cell Research	Cultures of MEFs of di?erent genotypes (p53+/+, p53+/7, p537/7) are treated with the inhibitor IC261 in the low micromolar range (1 μM). After 12, 24, 48 hours exposure, the effects of IC261 on cell cycle distribution are measured by flow cytometry.(Only for Reference)

Solubility Information

Solubility	DMSO: 70 mg/mL (224.84 mM),Sonication is recommended. Ethanol: < 1 mg/mL (insoluble or slightly soluble), H2O: < 1 mg/mL (insoluble or slightly soluble), (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.212 mL	16.0601 mL	32.1203 mL
5 mM	0.6424 mL	3.212 mL	6.4241 mL
10 mM	0.3212 mL	1.606 mL	3.212 mL
50 mM	0.0642 mL	0.3212 mL	0.6424 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Behrend L, et al. Oncogene. 2000, 19(47):5303-5313.
Sakurai E, et al. Mol Pain. 2009, 5:74.
Brockschmidt C, et al. Gut. 2008, 57(6):799-806.
Liu F, et al. Proc Natl Acad Sci U S A. 2001, 98(20):11062-11068.