# Data Sheet (Cat.No.T36684)



## **Ipivivint**

## **Chemical Properties**

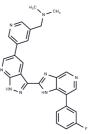
CAS No.: 1481617-15-5

Formula: C26H21FN8

Molecular Weight: 464.5

Appearance: no data available

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



## **Biological Description**

Description	Ipivivint, a first-in-class, orally active and potent CDC-like kinase (CLK) inhibitor, inhibits CLK1 (IC50=1.4 $\mu$ M), CLK2 (IC50=0.002 $\mu$ M) and CLK3 (IC50=0.022 $\mu$ M). Ipivivint reduces Wnt pathway signaling gene expression through inhibiting CLK activity and serine and arginine rich splicing factor (SRSF) phosphorylation and disrupting spliceosome activity. Ipivivint can be used for the research of cancer[1].
In vitro	Ipivivint (SW480 cells; 0.01~10 μM; 1 hour) potently inhibits SRSF5/6 phosphorylation[1].Ipivivint (SW480 cells; 0.03 μM~3 μM; 48 hour) induced apoptosis[1]Ipivivint (HEK-293T cells; 0.03 μM~3 μM; 1 hour) inhibits Wnt/β-catenin signaling induced by Wnt3a[1].Ipivivint (SW480 cells; 0.3~10 μM; 6 hour) increases nuclear speckle enlargement[1].Ipivivint (SW480 cells; 0.3~3μM; 24hours) significantly decreases expression of Wnt target genes (AXIN2, LEF1, MYC, and TCF7) and TCF7L2. SM08502 (SW480 cells; 0.03~3μM; 24hours) inhibits cytoplasmic or nuclear fractions protein expression. Ipivivint (NCI-N87 cells) inhibits proliferation[1].Ipivivint strongly inhibits Wnt pathway signaling activity (EC50 = 0.046 μM) in SW480 colon cancer cells[1].
In vivo	Ipivivint (25 mg/kg; p.o.) potently inhibits tumor SRSF6 phosphorylation[1].

### **Preparing Stock Solutions**

	1mg	5mg	10mg
1 mM	2.1529 mL	10.7643 mL	21.5285 mL
5 mM	0.4306 mL	2.1529 mL	4.3057 mL
10 mM	0.2153 mL	1.0764 mL	2.1529 mL
50 mM	0.0431 mL	0.2153 mL	0.4306 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

Tam BY, et al. The CLK inhibitor SM08502 induces anti-tumor activity and reduces Wnt pathway gene expression in gastrointestinal cancer models. Cancer Lett. 2020;473:186-197.

Page 1 of 2 www.targetmol.com



Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only· Not for Human or Veterinary or Therapeutic Use

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

Page 2 of 2 www.targetmol.com