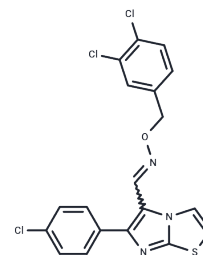


CITCO

Chemical Properties

CAS No. :	338404-52-7
Formula:	C19H12Cl3N3OS
Molecular Weight:	436.74
Appearance:	no data available
Storage:	store at low temperature
	Powder: -20°C for 3 years In solvent: -80°C for 1 year



Biological Description

Description	CITCO inhibits growth and expansion of brain tumour stem cells (BTSCs) and has an EC50 of 49 nM over pregnane X receptor (PXR), and no activity on other nuclear receptors. CITCO is an imidazothiazole derivative and it also is a selective Constitutive androstane receptor (CAR) agonist.
Targets(IC50)	Apoptosis,Others
In vitro	CITCO (1-50 µM; 48?hours) results in a dose-dependent inhibition of viable cell count and proliferation in both T98G and U87MG glioma and BTSCs. CITCO (0-25?µM; 48?hours) causes the T98G and U87MG glioma and BTSCs expressing very low levels of CAR protein that increased significantly. CITCO (2.5-10?µM; 48?hours) induces apoptosis in BTSCs in culture in dose dependently, but not in normal astrocytes. CITCO (2.5, 5?µM; 48?hours) induces cell cycle arrest differentially in different BTSCs in culture, but not in normal astrocytes[1].
In vivo	CITCO (intraperitoneal; 25?µg; on days 22, 24, 26, 30 and 36) results a significant decrease in tumour growth. After treatment with 100?µg CITCO, it further decreases to an undetectable level [1].

Solubility Information

Solubility	H2O: insoluble, DMSO: 11 mg/ml (25.19 mM), (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

A DRUG SCREENING EXPERT

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2897 mL	11.4485 mL	22.8969 mL
5 mM	0.4579 mL	2.2897 mL	4.5794 mL
10 mM	0.229 mL	1.1448 mL	2.2897 mL
50 mM	0.0458 mL	0.229 mL	0.4579 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

Chakraborty S, et al. Constitutive androstane receptor agonist CITCO inhibits growth and expansion of brain tumour stem cells. Br J Cancer. 2011 Feb 1;104(3):448-59.

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