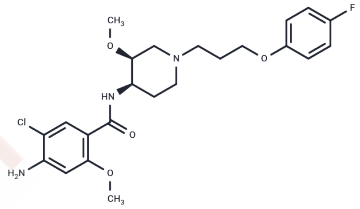
Data Sheet (Cat.No.T1291)

TargetMol

Cisapride

Chemical Properties



CAS No. : 81098-60-4

Formula: C23H29ClFN3O4

Molecular Weight: 465.95

Appearance: no data available

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

Biological Description

Description	Cisapride (R 51619) is a serotonin type 4 (5-HT4) receptor agonists are potent prokinetic agents that act on serotonin receptors in the intestine and promote intestinal peristalsis, increase gastric emptying and decrease esophageal reflux.
Targets(IC50)	5-HT Receptor,Potassium Channel
In vitro	Cisapride inhibits vascular Kv current independently of serotonin 5-HT4-receptor activation[2]. As HERG channel blocker, cisapride, can inhibit the growth of gastric cancer cells by altering distribution of cell cycle and inducing apoptosis so as to be of potential value in the treatment of gastric cancer. Cisapride could inhibit the growth and clonogenicity of human gastric cancer lines by specific blockage of HERG channel in a time- and dose-dependent manner while has little effects on GES cells[3].
Cell Research	Cells in the logarithmic growth phase are harvested and seeded in 96-well plates. The cell number is diluted to 5000/well in 200 microliters of RPMI1640 medium. In vitro experiments are carried out on the gastric cancer cell lines and GES cell line, using an MTT proliferation assay. MTT stains live cells, and the optical density absorbance at 490 nM wavelength correlates with the cell number. Cisapride is added to the cells at concentrations of 0, 12.5, 25, 50, 100 or 200 nM and equivalent volume of ethanol is added as control in order to eliminate the effects of solvent. Twenty microliters of MTT is added to each well of the cell culture 4 h before termination of the culture at 37?C. One hundred and fifty microliters of dimethyl sulfoxide is added to each well at the end of the culture and the plate is agitated for 10 minutes. The absorbency at 490 nm is read by a BIOHIT BP800 plate reader. Growth curve is drawn according to MTT colorimetry. The inhibition rate is calculated.(Only for Reference)

Solubility Information

Solubility	DMSO: 45 mg/mL (96.58 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1462 mL	10.7308 mL	21.4615 mL
5 mM	0.4292 mL	2.1462 mL	4.2923 mL
10 mM	0.2146 mL	1.0731 mL	2.1462 mL
50 mM	0.0429 mL	0.2146 mL	0.4292 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

Park JS, et al. Eur J Med Chem. 2016, 109:75-88.
Kim HW, et al.Biochem Biophys Res Commun. 2016, 478(3):1423-8.
Shao XD, et al. Cancer Biol Ther. 2005, 4(3):295-301.