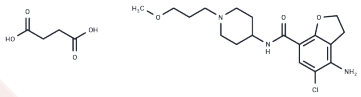
Data Sheet (Cat.No.T6958)

TargetMol

Prucalopride Succinate

Chemical Properties



CAS No. : 179474-85-2

Formula: C18H26ClN3O3·C4H6O4

Molecular Weight: 485.96

Storage: Keep away from moisture
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Prucalopride Succinate (Resolor Succinate) is a selective, high affinity 5-HT4 receptor agonist, inhibiting human 5-HT(4a) and 5-HT(4b) receptor with Ki value of 2.5 nM and 8 nM, respectively.
Targets(IC50)	Apoptosis,5-HT Receptor,Autophagy
In vitro	Prucalopride induces contractions in a concentration-dependent manner with pEC50 of 7.5. Prucalopride (1 mM) significantly amplifies the rebound contraction of the guinea-pig proximal colon after electrical field stimulation. Prucalopride induces relaxation of the rat oesophagus preparation of rat oesophagus tunica muscularis mucosae with pEC50 of 7.8, yielding a monophasic concentration-response curve. [1] Prucalopride (0.1 μM) concentration-dependently increases the amplitude of submaximal cholinergic contractions and of acetylcholine release induced by electrical field stimulation in pig gastric circular muscle, and the effect is induced and enhanced IBMX (10 μM). [2] Prucalopride (1 μM) significantly enhances the electrically induced cholinergic contractions in pig descending colon, and the facilitating effect is significantly enhanced by Rolipram. [3]
In vivo	Prucalopride alters colonic contractile motility patterns in a dose-dependent fashion by stimulating high-amplitude clustered contractions in the proximal colon and by inhibiting contractile activity in the distal colon of fasted dogs. Prucalopride also causes a dose-dependent decrease in the time to the first giant migrating contraction (GMC); at higher doses of prucalopride, the first GMC generally occurres within the first half-hour after treatment. [4]

Solubility Information

Solubility	Ethanol: < 1 mg/mL (insoluble or slightly soluble), H2O: 89 mg/mL (183.14 mM),Sonication is recommended. DMSO: 90 mg/mL (185.2 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 3.3 mg/mL (6.79 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and*

In vivo Formulation	*used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.0578 mL	10.2889 mL	20.5778 mL
5 mM	0.4116 mL	2.0578 mL	4.1156 mL
10 mM	0.2058 mL	1.0289 mL	2.0578 mL
50 mM	0.0412 mL	0.2058 mL	0.4116 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Briejer MR, et al. Eur J Pharmacol, 2001, 423(1), 71-83.
Priem E, et al. Neuropharmacology, 2012, 62(5-6), 2126-2135.
Priem EK, et al. Eur J Pharmacol, 2013, 705(1-3), 156-163.
Briejer MR, et al. Neurogastroenterol Motil, 2001, 13(5), 465-472.