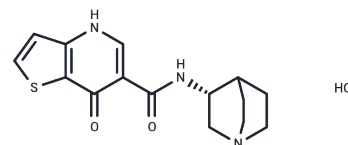


Pumosetrag Hydrochloride

Chemical Properties

CAS No. :	194093-42-0
Formula:	C ₁₅ H ₁₈ ClN ₃ O ₂ S
Molecular Weight:	339.84
Appearance:	no data available
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year



Biological Description

Description	Pumosetrag Hydrochloride is an orally available 5-HT ₃ partial agonist. It is developed for the treatment of irritable bowel syndrome and gastroesophageal reflux disease.
Targets(IC ₅₀)	5-HT Receptor
In vivo	Pumosetrag modulates gastrointestinal activity by delaying liquid gastric emptying through proximal stomach relaxation and enhancing fasting antroduodenal migrating motor complex activity, while also speeding up small intestinal transit. Its effectiveness varies across different sections of the mouse intestine, displaying minimal to no activity. This compound demonstrates regional and species-specific responses, with reduced efficacy compared to 5-HT in the rat's jejunum, ileum, and distal colon, yet showing comparable efficacy and potency in the rat's proximal colon. In contrast, Pumosetrag is more potent and effective than 5-HT across all regions of the guinea pig intestine. Its mechanism, mediated by 5-HT ₃ receptors, is confirmed by the inhibitory effect of ondansetron on its actions in rat and guinea pig tissues.

Solubility Information

Solubility	DMSO: 30 mg/mL (88.28 mM), Sonication and heating are recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.9426 mL	14.7128 mL	29.4256 mL
5 mM	0.5885 mL	2.9426 mL	5.8851 mL
10 mM	0.2943 mL	1.4713 mL	2.9426 mL
50 mM	0.0589 mL	0.2943 mL	0.5885 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

Chetty N, et al. Effects of the novel 5-HT₃ agonist MKC-733 on the rat, mouse and guinea pig digestive tract. Pharmacology. 2008;81(2):104-9. Epub 2007 Oct 19.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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