Itopride

Product Data Sheet

BIOLOGICAL ACTIVITY Description Itopride (HSR803 free base) is a potent and orally active dopamine-2 antagonist and an acetylcholine esterase (AChE) inhibitor. Itopride enhances gastric motility through both antidopaminergic and anti-acetylcholinesterasic actions, can be used as a gastrointestinal prokinetic agent. Itopride can be used for researching gastro-esophageal reflux disease (GERD^[1]. IC₅₀ & Target AChE D₂ Receptor In Vitro Itopride has prokinetic effects on both the ileum and colon, which are regulated through inhibitory effects on AChE and antagonistic effects on dopamine D2 receptor^[3]. Itopride hydrochloride (0.1 nM-1 μM) significantly accelerats the propagation velocity of the peristalsis in ex guinea pig ileum [3] MCE has not independently confirmed the accuracy of these methods. They are for reference only. In Vivo Itopride (30 mg/kg; p.o.) significantly accelerates gastric emptying compared with the vehicle group^[4]. Itopride (30 mg/kg; p.o.) displays C_{max} of 358 ‰, T_{1/2} of 24.9 min^[4]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

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[2]. Kim YS, et al. Effect of itopride, a new prokinetic, in patients with mild GERD: a pilot study. World J Gastroenterol. 2005 Jul 21;11(27):4210-4.

[3]. Hyun Chul Lim, et al. Effect of Itopride Hydrochloride on the Ileal and Colonic Motility in Guinea Pig In Vitro. Effect of Itopride Hydrochloride on the Ileal and Colonic Motility in Guinea Pig In Vitro. Yonsei Med J. 2008 Jun 30;49(3):472-8.

[4]. Kenjiro Matsumoto, et al. Validation of 13 C-Acetic Acid Breath Test by Measuring Effects of Loperamide, Morphine, Mosapride, and Itopride on Gastric Emptying in Mice. Biol Pharm Bull. 2008 Oct;31(10):1917-22.

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Caution: Product has not been fully validated for medical applications. For research use only.

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