

Motilin receptor (version 2020.4) in the IUPHAR/BPS Guide to Pharmacology Database

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Abstract

Motilin receptors (**provisional nomenclature**) are activated by [motilin](#), a 22 amino-acid peptide derived from a precursor ([MLN](#), [P12872](#)), which may also generate a [motilin-associated peptide](#). Activation of these receptors by endogenous motilin released from endocrine cells within the mucosa of the duodenum during fasting, induces propulsive phase III movements, part of the gastric migrating motor complex, and promotes the sensation of hunger. Drugs and other non-peptide compounds which activate the motilin receptor may generate a more long-lasting ability to increase cholinergic activity within the upper gut, to promote gastrointestinal motility; this activity is suggested to be responsible for the gastrointestinal prokinetic effects of certain macrolide antibiotics (often called motilides; e.g. erythromycin), although for many of these molecules the evidence is sparse. Relatively high doses of these compounds may induce vomiting and in humans, nausea.

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