

## Motilin receptor in GtoPdb v.2023.1

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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**. There are significant species differences in the structure of motilin and its receptor, and in the functions of motilin. In humans and large mammals such as dog, activation of these receptors by motilin released from endocrine cells in the duodenal mucosa during fasting, induces propulsive phase III movements. This activity is associated with promoting hunger in humans. In humans and other mammals 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 upper gastrointestinal motility; this activity is suggested to be responsible for the gastrointestinal prokinetic effects of certain macrolide antibacterials (often called motilides; *e.g.* erythromycin, azithromycin), although for many of these molecules the evidence is sparse. Relatively high doses may induce vomiting and in humans, nausea.

### Contents

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### Database links

#### Motilin receptor

<https://www.guidetopharmacology.org/GRAC/FamilyDisplayForward?familyId=41>

#### Introduction to Motilin receptor

<https://www.guidetopharmacology.org/GRAC/FamilyIntroductionForward?familyId=41>

Receptors

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