Motilin receptor in GtoPdb v.2023.1

Anthony P. Davenport¹, Takio Kitazawa² and Gareth Sanger³

1. University of Cambridge, UK
2. Rakuno Gakuen University, Japan
3. Queen Mary University of London, UK

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

This is a citation summary for Motilin receptor in the Guide to Pharmacology database (GtoPdb). It exists purely as an adjunct to the database to facilitate the recognition of citations to and from the database by citation analyzers. Readers will almost certainly want to visit the relevant sections of the database which are given here under database links.

GtoPdb is an expert-driven guide to pharmacological targets and the substances that act on them. GtoPdb is a reference work which is most usefully represented as an on-line database. As in any publication this work should be appropriately cited, and the papers it cites should also be recognized. This document provides a citation for the relevant parts of the database, and also provides a reference list for the research cited by those parts. For further details see [5].

Please note that the database version for the citations given in GtoPdb are to the most recent preceding version in which the family or its subfamilies and targets were substantially changed. The links below are to the current version. If you need to consult the cited version, rather than the most recent version, please contact the GtoPdb curators.

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
motilin receptor
https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=297

References

15. Hara
erling H, Cohen AF and Mas


