Glucagon receptor family (version 2019.4) in the IUPHAR/BPS Guide to Pharmacology Database

Dominique Bataille¹, Susan L. Char², Philippe Delagrange³, Daniel J. Drucker⁴, Burkhard Göke⁵, Rebecca Hills⁶, Kelly E. Mayo⁷, Laurence J. Miller⁸, Roberto Salvatori⁹ and Bernard Thorens¹⁰

Abstract

The glucagon family of receptors (nomenclature as agreed by the NC-IUPHAR Subcommittee on the Glucagon receptor family [159]) are activated by the endogenous peptide (27-44 aa) hormones glucagon, glucagon-like peptide 1, glucagon-like peptide 2, glucose-dependent insulinotropic polypeptide (also known as gastric inhibitory polypeptide), GHRH and secretin. One common precursor (GCG) generates glucagon, glucagon-like peptide 1 and glucagon-like peptide 2 peptides [116]. For a recent review on review the current understanding of the structures of GLP-1 and GLP-1R, the molecular basis of their interaction, and the signaling events associated with it, see de Graaf et al., 2016 [87].

Contents

This is a citation summary for Glucagon receptor family 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.

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**

**Glucagon receptor family**
http://www.guidetopharmacology.org/GRAC/FamilyDisplayForward?familyId=29

**Introduction to Glucagon receptor family**
http://www.guidetopharmacology.org/GRAC/FamilyIntroductionForward?familyId=29

**Receptors**
- GHRH receptor
  http://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=247
- GIP receptor
  http://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=248
- GLP-1 receptor
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- glucagon receptor
  http://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=251
- secretin receptor
  http://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=252

**References**


241. Usdin TB and Bonner TI. (1993) Gastric inhibitory polypeptide receptor, a member of the secretin-vasoactive intestinal peptide receptor family, is widely distributed in peripheral organs and the brain. *Endocrinology* **133**: 2861-2870 [PMID:8243312]


11: 1094-102 [PMID:9212057]


