

Receptor guanylyl cyclase (RGC) family (version 2019.4) in the IUPHAR/BPS Guide to Pharmacology Database

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Abstract

The mammalian genome encodes transmembrane and soluble receptor guanylyl cyclases, both of which have enzyme activities which convert [guanosine-5'-triphosphate](#) to the intracellular second messenger cyclic guanosine-3',5'-monophosphate ([cyclic GMP](#)).

Contents

This is a citation summary for Receptor guanylyl cyclase (RGC) 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.

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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

Receptor guanylyl cyclase (RGC) family

<http://www.guidetopharmacology.org/GRAC/FamilyDisplayForward?familyId=1022>

Transmembrane guanylyl cyclases

<http://www.guidetopharmacology.org/GRAC/FamilyDisplayForward?familyId=662>

Receptors

GC-A(Guanylyl cyclase-A)

<http://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=1747>

GC-B(Guanylyl cyclase-B)

<http://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=1748>

GC-C(Guanylyl cyclase-C)

<http://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=1750>

NPR-C(natriuretic peptide receptor 3)

<http://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=1749>

GC-D(Guanylyl cyclase-D)

<http://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=2898>

GC-E(Guanylyl cyclase-E)

<http://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=2031>

GC-F(Guanylyl cyclase-F)

<http://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=2899>

GC-G(Guanylyl cyclase-G)

<http://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=2900>

Nitric oxide (NO)-sensitive (soluble) guanylyl cyclase

<http://www.guidetopharmacology.org/GRAC/FamilyDisplayForward?familyId=939>

Receptors

Complexes

GC-1(Guanylyl cyclase, $\alpha_1\beta_1$)

<http://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=1287>

GC-2(Guanylyl cyclase, $\alpha_2\beta_1$)

<http://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=2897>

Receptors and Subunits

Guanylyl cyclase α_1 subunit

<http://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=1288>

Guanylyl cyclase α_2 subunit

<http://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=1289>

Guanylyl cyclase β_1 subunit

<http://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=1290>

Guanylyl cyclase β_2 subunit

<http://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=1291>

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