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# Receptor guanylyl cyclase (RGC) family in GtoPdb v.2023.1

Annie Beuve[1], Peter Brouckaert[2], John C. Burnett, Jr.[3], Andreas Friebe[4], John Garthwaite[5], Adrian J. Hobbs[6], Doris Koesling[7], Michaela Kuhn[8], Lincoln R. Potter[9], Michael Russwurm[10], Harald H.H.W. Schmidt[11], Johannes-Peter Stasch[12] and Scott A. Waldman[13]

1. Rutgers University, USA
2. Vlaams Instituut voor Biotechnologie, Belgium
3. Mayo Clinic, USA
4. Universität Würzburg, Germany
5. University College London, UK
6. Queen Mary University of London, UK
7. Ruhr-Universität Bochum, Germany
8. Physiologisches Institut der Universität Würzburg, Germany
9. University of Minnesota, USA
10. Ruhr University Bochum, Germany
11. Maastricht University, The Netherlands
12. Bayer AG, Germany
13. Thomas Jefferson University, USA

## Abstract

The mammalian genome encodes seven guanylyl cyclases, GC-A to GC-G, that are homodimeric transmembrane receptors activated by a diverse range of endogenous ligands. These enzymes convert guanosine-5'-triphosphate to the intracellular second messenger cyclic guanosine-3',5'-monophosphate (cyclic GMP). GC-A, GC-B and GC-C are expressed predominantly in the cardiovascular system, skeletal system and intestinal epithelium, respectively. GC-D and GC-G are found in the olfactory neuropepithelium and Grueneberg ganglion of rodents, respectively. GC-E and GC-F are expressed in retinal photoreceptors.

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## Database links

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  - Receptors
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      - Guanylyl cyclase $\beta_2$ subunit
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