

Special Issue

G Protein-Coupled Receptors: Molecular Mechanisms Involved in Receptor Activation and Selectivity

Message from the Guest Editors

G Protein-Coupled Receptors (GPCRs) are seven-transmembrane receptors that upon activation predominately transduce their signals through the alpha subunits of heterotrimeric G proteins. GPCRs are present in all cell types and regulate a plethora of physiological functions, whose alterations lead to a pathogenic readout. Many GPCRs show basal activity that can be modulated by ligands with different efficacy. Full agonists are able to induce the maximal signaling response, while some ligands, known as biased ligands, selectively activate certain receptor-associated pathways at the expense of others. The interaction of GPCRs with extracellular ligands induces an extremely variable response due to the distinct distribution of active conformations of these receptors. Ligand binding and downstream signaling have also been shown to be influenced by the dimeric nature of the receptors.

Guest Editors

Dr. Rossella Miele

Department of Biochemical Sciences "A. Rossi Fanelli", Sapienza University of Rome, Piazzale Aldo Moro 5, I-00185 Rome, Italy

Dr. Roberta Lattanzi

Department of Physiology and Pharmacology "Vittorio Erspamer", University Sapienza, Rome, Italy

Deadline for manuscript submissions

closed (31 August 2022)



Life

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 4.3
Indexed in PubMed



mdpi.com/si/81878

Life

MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
life@mdpi.com

mdpi.com/journal/

[life](https://mdpi.com/journal/)





Life

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 4.3
Indexed in PubMed



[mdpi.com/journal/
life](https://mdpi.com/journal/life)



About the Journal

Message from the Editor-in-Chief

Life (ISSN 2075-1729) is an international, peer-reviewed open access journal that publishes scientific studies related to fundamental themes in life sciences. Some papers are published individually, while others are submitted for inclusion in special issues with guest editors. You are invited to contribute a research article, essay, or a review to be considered for publication.

Editor-in-Chief

Prof. Dr. Lluís Ribas de Pouplana

Institute for Research in Biomedicine (IRB Barcelona), The Barcelona
Institute of Science and Technology, 08028 Barcelona, Spain

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPIus / SciFinder, AGRIS, and other databases.

Journal Rank:

JCR - Q1 (Biology) / CiteScore - Q1 (Paleontology)