



an Open Access Journal by MDPI

Ion Channels as Therapeutic Target: Drug Design and Pharmacological Investigation

Guest Editors:

Dr. Gabriella Guerrini

Dipartimento NEUROFARBA, Università degli Studi di Firenze, Via U. Schiff, 6, 50019 Polo Scientifico, Sesto Fiorentino, Firenze, Italy

Dr. Maria P. Giovannoni

Dipartimento di Scienze Farmaceutiche, Università degli Studi di Firenze, via Ugo Schiff 6, 50019 Sesto Fiorentino, Italy

Deadline for manuscript submissions: closed (30 April 2023)

Message from the Guest Editors

The ion channels include two principal types of membrane proteins:

1. The ligand-gated ion channel (LGICs), opened by neurotransmitters or ligands that bind the orthosteric or allosteric sites, involved in the overall fast synaptic transmission in the nervous system;

2.Voltage-gated ion channels, opened or closed by a change in the electrical gradient across the membrane.

Ion channels are very intriguing targets, this Special Issue aims to collect contributions in the drug design, molecular modelling, pharmacological investigation and therapeutic applications of ion channel ligands.

Keywords

- LGIC
- voltage-gated ion channel
- other ion channels
- biological studies
- diseases
- molecular modeling
- drug design
- synthesis





mdpi.com/si/111036





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences, Sez-Biochimica, Faculty of Medicine, Università Politecnica delle Marche, Via Ranieri 65, 60100 Ancona, Italy

Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Inorganic Chemistry)

Contact Us

International Journal of Molecular Sciences Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/ijms ijms@mdpi.com X@IJMS_MDPI