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Novel Drug Design and Activity Targeting Ion Channels

Guest Editors:

Dr. Maegan Weltzin

1. College of Natural Science and Mathematics, Department of Chemistry and Biochemistry, CNSM Division of Research, The University of Alaska Fairbanks, Fairbanks, AK, USA
2. Barrow Neurological Institute, Phoenix, AZ, USA

Dr. Dinesh Indurthi

University at Buffalo, The State University of New York, Buffalo, NY, USA

Deadline for manuscript submissions:

closed (31 August 2023)

Message from the Guest Editors

Dear Colleagues,

Ion channels (ICs) are transmembrane ionotropic receptors that pass mono- and/or divalent ions when a chemical messenger, such as a neurotransmitter, activates the receptor. ICs are involved in a wide range of neurological disorders of high clinical significance, including nicotine addiction, depression and Alzheimer's disease. Drugs targeting ICs can bind competitively or noncompetitively to activate or inhibit an agonist response. Molecules binding in distinct modalities can reveal how a specific IC functions, which can facilitate the development of novel therapies.

In recent decades, ICs have been prime targets for drug discovery efforts, resulting in some clinical translation success, including anaesthetics, analgesics, antidepressants and addiction therapies. ICs remain one of the most important proteins used to study structure–activity relationships (SARs) and targets for novel drug design efforts. This Special Issue invites papers on drug action and/or drug design for drugs targeting ICs.



mdpi.com/si/131408

Special Issue



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Editor-in-Chief

Prof. Dr. Thomas J. Schmidt

Institute of Pharmaceutical
Biology and Phytochemistry,
University of Münster,
Corrensstrasse 48, D-48149
Münster, Germany

Message from the Editor-in-Chief

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Molecules Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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