

Special Issue

Ion Channels and Transporters in Immune Function and Inflammatory Disease

Message from the Guest Editors

Ion channels and transporters play essential roles in regulating immune cell activation and signalling, coordinating a wide range of cellular processes through the control of ionic homeostasis and membrane potential. These transmembrane proteins critically influence immune responses, including cytokine production, antigen presentation, phagocytosis, and the initiation and resolution of inflammation. In recent years, accumulating evidence has highlighted their essential roles in both innate and adaptive immunity. Importantly, dysregulation of ion channels and transporters has been increasingly linked to the pathogenesis of numerous inflammatory and immune-mediated diseases, such as autoimmune disorders, cardiovascular inflammation, and infectious diseases. Advances in molecular biology, electrophysiology, and disease modelling have significantly deepened our understanding of how these proteins contribute to immune regulation and disease progression, while also revealing their potential as novel therapeutic targets.

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Biomolecules is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in *Biomolecules* so far. We would be delighted to welcome you as one of our authors.

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