

Topical Collection

Advance in Ion Channel Signaling in Cancer Cells

Message from the Collection Editors

The large family of membrane-spanning ion channels contributes significantly to the transmission and integration of extracellular signals, both chemical and mechanical, that originate from the microenvironment and stroma where the cells reside. A growing body of studies points to a crucial role of ion channels in the dynamics of neoplastic cells. This collection will gather special contributions showing how cancer cells hijack the physiological functions of different types of ion channels and how changes in their activity and/or expression contribute to the neoplastic phenotype. This Special Issue will also address the involvement of ion channels in a rare subpopulation of cells called cancer stem cells that possess the potential to initiate and sustain tumour growth and to regenerate the tumour after the cessation of treatment. This collection also aims to report the recent developments on the molecular mechanisms, e.g., ion transport or noncanonical channel functions, whereby ion channels contribute to various extents to the pathophysiological features of cancer hallmarks. We look forward to your contribution in the form of original research or review articles.

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About the Journal

Message from the Editorial Board

Cells has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. *Cells* encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 16 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).