

Topical Collection

Deciphering the Proteome in Cell Biology and Diseases

Message from the Collection Editor

Dear Colleague, Proteins are essential functional biomolecules that participate in almost all cellular processes, and are profoundly implicated in disease settings. They form a highly organized and structured proteome that orchestrates synthetic, catalytic, and regulatory functions in the cell. The constituents of the cellular proteome, including protein identity, abundance, structure, post-translational modifications (PTMs), polymorphism, and cellular localization, dynamically and quantitatively define the phenotype and functional state of a cell. With the advances in mass spectrometry, bioinformatics, and knowledge base, proteomics has become a pivotal platform enabling the systematic study of the proteome and its functional implications in cell biology and diseases. In this Topical Collection, we welcome the submission of original research or review articles aiming at the broad field of basic, translational, and clinical research using proteomic approaches.

Keywords

- proteomics
- mass spectrometry
- post-translational modifications
- bioinformatics
- biomarker
- proteome

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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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Rapid Publication:

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).