

GENE & PROTEIN IN DISEASE

Protease Research in Molecular Mechanisms of Pathophysiology

Guest Editor



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Metallo proteases
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Message from the Guest Editor

Proteases, are a diverse group of enzymes that play critical roles in a wide range of biological processes, including protein degradation, cell signaling, and inflammation. Dysregulation of proteolytic activity has been implicated in the pathogenesis of various diseases, including cancer, neurodegenerative disorders, and inflammatory conditions.

This special issue aims to provide a comprehensive overview of the latest advances in our understanding of the role of proteolytic enzymes in different diseases. We invite researchers to submit original research papers and reviews that focus on the following topics:

- Role of proteases in pathologic molecular pathways: Description and characterization of novel pathological mechanisms and pathways in which proteases cover a key role by initiating or promoting disease progression.
- Proteases as biomarkers and diagnostic tools: Identification and validation of novel proteases as biomarkers for disease diagnosis, prognosis, and monitoring. Development of new proteomic and enzymatic assays for evaluating protease expression and activity.
- Protease inhibitors in disease therapy: Design, synthesis, and evaluation of novel protease inhibitors for the treatment of various diseases. Investigation of the mechanisms of action of protease inhibitors and their potential clinical applications.

We encourage submissions of reviews, commentary, basic and translational research that addresses the role of proteolytic enzymes in different diseases. We also encourage the submission of manuscripts that focus on the development of new therapeutic strategies based on targeting proteases.