



Roles of Sulfatases and Sulfotransferases in Fundamental Biological Processes

Guest Editor:

Dr. Joanne Tobacman

Jesse Brown VA Medical Center,
University of Illinois at Chicago,
Chicago, IL 60612, USA

Deadline for manuscript
submissions:

closed (30 June 2022)

Message from the Guest Editor

Identification of the roles of sulfatases, sulfotransferase enzymes, and sulfated glycosaminoglycans (GAGs) in signaling, transcription, and cell differentiation has focused on the mechanisms of action in well-defined biological systems. Together, sulfatases, sulfotransferases, and sulfated GAGs confer remarkable specificity in the regulation of vital processes in plants, microbiota, and macrobiota. The specific, chemically precise recognition signals attributable to localized sulfates can influence vital cell processes in immunity and host cell responses to infection, as well as in activation/inactivation of steroid hormones, coagulation, drug metabolism, and cell signaling. The articles in this issue on this topic will reveal the range of effects of sulfation, outline what is known about the underlying molecular and biochemical pathways, and suggest avenues for future investigations.

Keywords:

- Sulfatase
- Sulfotransferase
- Heparin
- Chondroitin Sulfate
- Sulfated Glycosaminoglycans (GAGs)
- Sulfation





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of
Odontostomatologic and
Specialized Clinical Sciences,
Sez-Biochimica, Faculty of
Medicine, Università Politecnica
delle Marche, Via Ranieri 65,
60100 Ancona, Italy

Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (*Biochemistry & Molecular Biology*) / CiteScore - Q1 (*Inorganic Chemistry*)

Contact Us

*International Journal of Molecular
Sciences* Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/ijms
ijms@mdpi.com
X@IJMS_MDPI