Special Issue

Molecular Research of Autophagy and Apoptosis

Message from the Guest Editor

Balance between cell death and survival is of key importance in maintaining cellular homeostasis. Three major types of programmed cell death (PCD) have been distinguished: apoptosis (type I), autophagic cell death (type II), and necrosis (type III), which are interconnected through molecular crosstalk mechanisms. Characterization of the complex interplay among PCD processes is crucial as it underlies the pathogenesis of multiple diseases, especially cancer.

Recent studies show that apoptosis is a barrier that tumor cells have to overcome in order to survive. Elimination of apoptotic cell debris by phagocytosis is required to prevent inflammation, which is known as a factor that might favour tumor progression. Autophagy, which was originally characterized as a cell survival mechanism in response to starvation but also known as a cell death modulator, may influence the pathological conditions of cancer by altering metabolic conditions.

Further elucidation of basic molecular mechanisms playing a role in PCD processes, furthermore better understanding of their interactions may pave the way for new treatment strategies of cancer.

Guest Editor

Prof. Dr. Krisztina Takács-Vellai
Department of Biological Anthropology, Institute of Biology, Eötvös Loránd University, Budapest, Hungary

Deadline for manuscript submissions

closed (31 December 2021)

International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed

mdpi.com/si/56137

International Journal of Molecular Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
ijms@mdpi.com

mdpi.com/journal/ijms

MDPI

International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed

mdpi.com/journal/ijms

MDPI

About the Journal

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.

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

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 and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)