

Special Issue

Purine Nucleotides Metabolism and Signaling in Human Diseases: Search for a Target for Novel Therapies

Message from the Guest Editor

Among purine nucleotides metabolism, the cyclic AMP (cAMP) discovered as the “second messenger”, was first investigated as the main contributor of intracellular signaling. Currently, the development of molecular biology allows us to investigate and classify the superfamily of cyclic nucleotide phosphodiesterases. They specifically control cyclic nucleotides levels at different cellular levels, hydrolyzing cyclic nucleotides in their respective nucleotide monophosphates, which can modulate cellular signaling cascade. Our knowledge of intracellular signaling regulation drastically increased during the last fifty years opening the development of multiple signaling pathways, issued from purine nucleotides. In the present Special Issue, it would be of interest to consider not only part of the specific molecular regulations of signaling, but to consider the whole signalosome, determining links inside the regulatory cascade and purine nucleotides mechanisms in normal and pathological states in humans, in order to develop new therapeutic approaches.

Guest Editor

Prof. Dr. Claire Lugnier

Section de Structures Biologiques, Pharmacologie et Enzymologie, CNRS/Unistra, CRBS, UR 3072, CEDEX, 67084 Strasbourg, France

Deadline for manuscript submissions

closed (31 August 2023)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/135825

*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](https://mdpi.com/journal/ijms)





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](https://mdpi.com/journal/ijms)



About the Journal

Message from the Editor-in-Chief

The *International Journal of Molecular Sciences (IJMS)* 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, and molecular biophysics. *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. José L. Quiles
Department of Physiology, Institute of Nutrition and Food Technology
"Jose Mataix", Biomedical Research Center, University of Granada,
Avda. Conocimiento s/n, 18100 Armilla, Granada, Spain

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, CAPus / SciFinder, and other databases.

Journal Rank:

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