

Special Issue

Role of Protein Kinase CK2 in Molecular Biology

Message from the Guest Editor

CK2 (casein kinase 2, CKII) is a serine threonine kinase, known to be essential for eukaryotic cell signaling for proliferation, survival and development. More than 300 proteins have been identified as CK2 substrates in the cells, elucidating diverse molecular functions of CK2 that depend on its defined cellular localization and biological time axis. Recently, functional genomic studies have demonstrated alterations in CK2 catalytic subunit alpha (*CSNK2A1*) in developmental disease, along with accumulated evidence concerning the overexpression of CK2 gene and/or protein levels in multiple types of human cancers. Based on these findings, drug discovery targeting this kinase has been piloted worldwide. In view of these current research efforts, this Special Issue focuses on original research articles and reviews, investigating the mechanisms underlying the function of protein kinase CK2 in the field of molecular biology, genomics, functional proteomics, epidemiology, pharmacology, protein structural biology, and cell biology. Trans-omics studies elucidating the function of CK2 are also welcome.

Guest Editor

Dr. Miwako Kato Homma

Department of Biomolecular Sciences, Fukushima Medical University
School of Medicine, Fukushima 960-1295, Japan

Deadline for manuscript submissions

closed (30 December 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/148812

*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)