

Special Issue

Molecular Mechanisms of Natural Product-Induced Immune Modulation: From Signaling Pathways to Therapeutic Targets

Message from the Guest Editor

Natural products represent an invaluable source of bioactive compounds with diverse immunomodulatory properties. Despite their long history in traditional medicine, the molecular mechanisms underlying their immune-regulating effects remain incompletely understood. This Special Issue aims to explore how natural products modulate immune responses at the molecular level, bridging traditional knowledge with modern molecular biology. We welcome original research articles, reviews, and communications that investigate the molecular basis of natural-product-induced immunomodulation. Topics of interest include, but are not limited to, the following: mechanisms of immune cell activation or suppression; inflammatory and anti-inflammatory pathways; innate and adaptive immune responses; molecular targets in autoimmune diseases, chronic inflammation, and cancer immunity; host–pathogen interactions and antimicrobial immunity; structure–activity relationships and target identification; biomarker discovery and mechanism-based therapeutic applications; synergistic effects and molecular interactions of natural product combinations; and novel methodologies for studying natural product immunology.

Guest Editor

Prof. Dr. Suyun Lyu

Department of Pharmacy, Suncheon National University, Suncheon
57922, Jeollanam-do, Republic of Korea

Deadline for manuscript submissions

28 February 2026



Current Issues in Molecular Biology

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 3.7
Indexed in PubMed



mdpi.com/si/252707

*Current Issues in Molecular
Biology*
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
cimb@mdpi.com

[mdpi.com/journal/
cimb](https://mdpi.com/journal/cimb)





Current Issues in Molecular Biology

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 3.7
Indexed in PubMed



[mdpi.com/journal/
cimb](https://mdpi.com/journal/cimb)



About the Journal

Message from the Editor-in-Chief

Editor-in-Chief

Prof. Dr. Madhav Bhatia

Department of Pathology and Biomedical Science, University of Otago,
Christchurch, 2 Riccarton Avenue, P.O. Box 4345, Christchurch 8140,
New Zealand

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PMC,
PubMed, Embase, CAPus / SciFinder, FSTA, AGRIS, and
other databases.

Rapid Publication:

manuscripts are peer-reviewed and a first decision is
provided to authors approximately 17.8 days after
submission; acceptance to publication is undertaken in 2.7
days (median values for papers published in this journal in
the first half of 2025).

Recognition of Reviewers:

APC discount vouchers, optional signed peer review, and
reviewer names are published annually in the journal.