Special Issue

Molecular Genetics of Human Leucocyte Antigen in Diseases

Message from the Guest Editor

Classical HLA (Human Leukocyte Antigen) is the Major Histocompatibility Complex (MHC) present in humans. The association between HLA genes and diseases has been studied since 1967, and no definite pathogenic mechanisms have been established yet. The study of HLA-G immune modulation gene (and also of -E and -F) has began in the same arduous way, where statistics and allele association are the trending subjects, with the same few results being obtained by HLA classical genes. Thus, we believe that it is necessary to follow different research methodologies: (1) to approach this problem based on how evolution has maintained together a cluster of immune-related genes (the MHC) in a relatively short chromosome area from the evolution of amniotes to humans, i.e., immune-regulatory genes (MHC-G, -E and -F), adaptive immune classical class I and II genes, non-adaptive immune genes like C2, C4 and Bf, and (2) to propose the allelism of complement factors for studying MHC complement genes, complotypes, and extended MHC haplotypes, which may be more informative that single MHC marker studies.

Guest Editor

Prof. Dr. Antonio Arnaiz-Villena

Department of Immunology, Universidad Complutense de Madrid, 28012 Madrid, Spain

Deadline for manuscript submissions

closed (27 April 2025)

International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed

mdpi.com/si/193744

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)