Special Issue

Human Leukocyte Antigen (HLA)—Antigen Interactions in Vaccine Development

Message from the Guest Editor

Vaccines are used to prevent illnesses caused by pathogens. Vaccines contain antigens of pathogens that induce the host to produce antibodies against them. The success of vaccines in prevention or therapy depends on the ability of the host to make antibodies against the vaccine antigen(s). In turn, this depends on host immunogenetics, i.e., the availability of human leukocyte antigen (HLA) alleles that can form a complex with the antigen (or its fragments) to engage CD4+ T lymphocytes and then B cells for antibody formation. Thus, this antigen-HLA interaction is critical for the production of antibodies and success of the vaccine. This Special Issue centers on this association between vaccine antigens and HLA molecules that initiate antibody production. This journal welcomes original research articles and reviews on research areas focusing on antigen-HLA interactions in vaccine development and vaccine effectiveness. Research or review articles on the role of HLA in antigen presentation, antibody production, and vaccine effectiveness are welcome.

Guest Editor

Prof. Dr. Apostolos P. Georgopoulos

Department of Neuroscience, Brain Sciences Center, University of Minnesota Medical School, Minneapolis, MN 55455, USA

Deadline for manuscript submissions

31 July 2026



an Open Access Journal by MDPI

Impact Factor 3.4
CiteScore 9.9
Indexed in PubMed



mdpi.com/si/197119

Vaccines
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
vaccines@mdpi.com

mdpi.com/journal/vaccines





an Open Access Journal by MDPI

Impact Factor 3.4 CiteScore 9.9 Indexed in PubMed



About the Journal

Message from the Editor-in-Chief

Vaccines (ISSN 2076-393X) has had a 6-year history of publishing peer-reviewed state of the art research that advances the knowledge of immunology in human disease protection. Immunotherapeutics, prophylactic vaccines, immunomodulators, adjuvants and the global differences in regulatory affairs are some of the highlights of the research published that have shaped global health. Our open access policy allows all researchers and interested parties to immediately scrutinize the rigorous evidence our publications have to offer. We are proud to present the work and perspectives of many to contribute to future decisions concerning human health.

Editor-in-Chief

Prof. Dr. Ralph A. Tripp

Department of Infectious Diseases, College of Veterinary Medicine, University of Georgia, Athens, GA 30602-7387, USA

Author Benefits

High Visibility:

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

Journal Rank:

JCR - Q2 (Medicine, Research and Experimental) / CiteScore - Q1 (Pharmacology (medical))

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 19.6 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the first half of 2025).

