

Special Issue

Nanobodies as Tools to Study and Modulate Immunity and Inflammation

Message from the Guest Editors

In 1993, Raymond Hamers' group published the discovery of a new type of immunoglobulin in the serum of camels. These antibodies were termed "heavy-chain-only antibodies" or HcAbs. The discovery of these unique antibodies set the base for the generation of nanobodies, the antigen-binding domains of HcAbs (termed VHH, variable domain of the heavy chain of heavy-chain-only antibodies) recombinantly expressed as single domain antibodies. Nanobodies can be generated by using the phage display or any other desired display technologies in order to identify target-specific binders and to reveal their corresponding DNA sequence. The latter can be used to design vectors for the in vitro production of the identified nanobodies, either as monomers, dimers, heterotrimers, or any other desired format. Nanobodies exhibit some unique features: they represent the smallest naturally occurring antigen binding domains, exhibit high temperature and pH stability, and show the ability to bind molecular clefts and hidden epitopes. This Special Issue aims to provide a current overview of the application of nanobodies in the field of immunity and inflammation.

Guest Editors

Dr. Stephan Menzel
Dr. Thomas Eden
Dr. Björn Rissiek

Deadline for manuscript submissions

closed (30 June 2020)



Antibodies

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 4.9
Indexed in PubMed



mdpi.com/si/38766

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

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





Antibodies

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 4.9
Indexed in PubMed



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



About the Journal

Message from the Editor-in-Chief

Antibodies is a relatively new journal with a major focus on quick dissemination of knowledge related to antibodies, especially how to quickly translate basic research results to therapeutic applications. Because it covers all areas related to antibodies unexpected connections between different areas could be made, leading to major discoveries and opening new fields of research and development. This is enhanced by the large readership of the many antibody-related areas of research. A specific priority area is human monoclonal antibodies for therapy of diseases and aging.

Editor-in-Chief

Prof. Dr. Arne Skerra

Institute of Biological Chemistry, Technical University Munich, Emil-Erlenmeyer-Forum 5, 85350 Freising-Weihenstephan, Germany

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

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

Journal Rank:

CiteScore - Q2 (Immunology and Allergy)