

Special Issue

Recombinant Binding Proteins and Genetically Engineered T-cells Targeting Intracellular Neoantigens

Message from the Guest Editors

Two different strategies are currently at the forefront of clinical interest for targeting intracellular neoantigens in benign and malignant diseases: T-cell-receptor (TCR)-engineered T-cells and recombinant antibodies. Recombinant T-cell-based therapies targeting neoantigens use T-cells expressing a recombinant complete TCR (TCR-T-cell), a chimeric antigen receptor with the variable domains of a neoepitope-reactive TCR are fused to the chimeric antigen receptor as a binding domain (TCR-CAR T-cell) or a TCR-like antibody as a binding domain (TCR-like-CAR T-cell). In contrast to the use of recombinant T-cells, recombinant binding proteins, including antibodies, can be directly applied to cancer patients. The recombinant binding proteins targeting MHC/neoepitope complexes include DARPins, TCR-like antibodies, bispecific antibodies in the format CD3 x TCR-like antibody or CD3 x soluble TCR, as well as intrabodies. Both strategies have their pros and cons and will be discussed in this Special Issue.

Guest Editors

Prof. Dr. Thomas Böldicke

Helmholtz-Centre for Infection Research, Structure and Function of Proteins, Inhoffenstraße 7, D 38124 Braunschweig, Germany

Dr. Ana Maria Waaga-Gasser

1. Division of Renal Medicine, Department of Medicine, Brigham and Women's Hospital, Boston, MA 02115, USA 2. Department of Medicine, Harvard Medical School, Boston, MA 02115, USA

Deadline for manuscript submissions

25 February 2026



Antibodies

an Open Access Journal
by MDPI

Impact Factor 2.7
CiteScore 4.5
Indexed in PubMed



mdpi.com/si/203167

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 2.7
CiteScore 4.5
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

Chair of Biological Chemistry, Technical University of Munich, Emil-Erlenmeyer-Forum 5, 85354 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 (Drug Discovery)