# Special Issue

# The Role of IgE and IgG Antibodies in Allergic Reactions: Cellular Mechanisms and Biological Implications

## Message from the Guest Editors

The central role of IgE in allergic diseases has been extensively researched, placing IgE antibodies and their functions at the forefront of therapeutic efforts against allergies. IgE antibodies play a crucial role in initiating and perpetuating allergic inflammation by binding to Fc□RI receptors on effector cells. This interaction triggers effector cell activation, leading to the release of potent inflammatory mediators. In recent years, it has become clear that IgG is an essential regulator of allergic responses. Both natural allergen-specific IgG and immunotherapy-induced IgG are capable of suppressing allergies either as blocking or inhibitory antibodies. Other research has shed light on the presence of endogenous anti-IgE IgG autoantibodies which can reduce IgE levels and suppress allergy. In addition, recent findings have highlighted the role of glycans in the induction of anti-IgE antibodies, revealing a complex dynamic between glycans, IgE, and IgG in allergic diseases. This Special Issue aims to provide an overview of the latest progress in understanding the role of IgE and IgG in allergic diseases, covering both cellular mechanisms and biological implications.

## Guest Editors

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## Deadline for manuscript submissions

31 August 2025

**Cells**

**an Open Access Journal by MDPI**

**Impact Factor 5.2**
**CiteScore 10.5**
**Indexed in PubMed**

mdpi.com/si/198880

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*Cells* has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. *Cells* encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

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