MOLECULAR IMMUNOLOGY

DESCRIPTION

Molecular Immunology publishes original articles, reviews and commentaries on all areas of immunology, with a particular focus on description of cellular, biochemical or genetic mechanisms underlying immunological phenomena. Studies on all model organisms, from invertebrates to humans, are suitable. Examples include, but are not restricted to: Infection, autoimmunity, transplantation, immunodeficiencies, inflammation and tumor immunology. Mechanisms of induction, regulation and termination of innate and adaptive immunity. Intercellular communication, cooperation and regulation. Intracellular mechanisms of immunity (endocytosis, protein trafficking, pathogen recognition, antigen presentation, etc). Mechanisms of action of the cells and molecules of the immune system. Structural analysis. Development of the immune system. Comparative immunology and evolution of the immune system. "Omics" studies and bioinformatics. Vaccines, biotechnology and therapeutic manipulation of the immune system (therapeutic antibodies, cytokines, cellular therapies, etc). Technical developments.

To be acceptable for publication, studies that describe correlations between disease and genetic polymorphisms would normally be required to include novel mechanistic findings underlying the associations.

Clinical studies correlating disease and measurements of a molecule or cell type would likewise not be suitable for publication without novel mechanistic insights.

Studies describing pharmacological agents are welcome if they provide significant novelty on the mechanisms of action.

Articles that use commonly available tools to predict T and B cell epitopes should adhere to the following principles; (i) The authors should clearly demonstrate novel aspects to the analysis by incorporating new tools or approaches to epitope prediction or in silico vaccine design. These must extend beyond publically available tools. Or (ii) The authors should include some experimental validation of immunogenicity (e.g. functional assays of T cell responses to synthetic peptides spanning the predicted region in immunised or convalescent individuals exposed to the source of antigen or ELISA of serum from immunised or antigen exposed individuals).

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Technical developments

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