MOLECULAR IMMUNOLOGY

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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.

Articles based primarily on studies in silico must adhere to the following principles: (i) The article must report novel analytical tools, approaches and/or databases rather than using publicly available ones; or (ii) The article must include substantial experimental validation of the conclusions obtained in silico.

Manuscripts related to regulatory RNA (e.g. microRNAs, IncRNAs or circRNAs) are welcome but please note: (i) they must show clear physiological relevance supported by in vivo results or clinical observations; (ii) Correlations between regulatory RNA expression with human diseases should be experimentally validated; (iii) Functions associated with the regulatory RNAs must within the scope of the journal i.e. inflammation and/or immune responses.

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.
AUDIENCE

Researchers in immunology, molecular biology and molecular genetics.

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INTRODUCTION

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.

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

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