Special Issue

Antigen Processing in Autoimmunity and Cancer— Mechanisms and Translational Perspectives

Message from the Guest Editor

Antigen processing refers to a series of molecular events that result in the presentation of antigenic peptides by major histocompatibility complex molecules. Associations between human genetic polymorphisms and numerous autoimmune diseases. as well as anti-infectious immune responses, showcase the variable efficacy and susceptibility to modulation of the antigen processing machinery. This variation implicates polymorphism not only in MHC molecules but also in proteolytic enzymes. The importance of an unperturbed function of antigen processing for organismal homeostasis is highlighted by downregulation of key elements in this machinery by malignant or virally infected cells. This Special Issue will present a collection of original research articles and reviews that, on the one hand, report and discuss harmful interference with antigen processing and presentation in autoimmunity and cancer and, on the other hand, present leads and approaches to exploiting and manipulating antigen processing to promote favorable enhancement of antitumor immunity and dampening of autoimmune responses.

Guest Editor

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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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