Special Issue

The Role of Proteases and Protease Inhibitors in the Immune System

Message from the Guest Editor

Proteases and protease inhibitors are key players in a large number of processes involved in immunity and also in the evasion of the immune system by infectious organisms. Proteases of cytotoxic T cells and natural killer cells (NK-cells) induce apoptosis in target cells via cleavage and, as a result, the activation of another set of proteases, the caspases. Mast cells use proteases to regulate blood pressure via angiotensin cleavage. Neutrophil proteases help these cells to migrate through tissues to reach the site of infection. Proteases are also key players in both the complement and the coagulation systems. The activity of these sometimes very potent proteases needs to be controlled, and to a large extent protease inhibitors are responsible for this. If left uncontrolled, some of them can cause severe negative effects. This Special Issue will try to address some of the important outstanding questions regarding the proteases and protease inhibitors involved in immunity.

Guest Editor

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