

Special Issue

Purine Signaling as a Therapeutic Target in Human Diseases

Message from the Guest Editor

It is well known that adenosine and ATP play a dual role within the purinergic system. They mediate both energy storage and release through ATP and its phosphate hydrolysis to ADP and AMP, thereby meeting cellular energy demands and facilitating nucleotide assembly. Additionally, they serve as signaling molecules. Purine molecules bind to extracellular purinergic receptors, stimulate signaling pathways, and exert specific functions. Purinergic signaling interacts with other signal molecules in a complex network, regulating a wide variety of cellular processes. The pathological dysregulation of purinergic signaling has been observed in aging, as well as in the development of different diseases, including inflammation, neurodegeneration, and tumors. A deeper understanding of the molecular mechanisms behind purinergic signaling could lead to new and exciting perspectives on the treatment of human diseases. We invite the submission of original papers on purinergic signaling in human diseases, as well as narrative reviews, meta-analyses, and systematic reviews, for this Special Issue.

Guest Editor

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