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Purinergic Signaling in Neuroinflammation

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Message from the Guest Editors

The physiological effect of extracellular ATP is mediated by its interaction with specific purinergic receptors. All purinergic receptors are divided into P1-purinoreceptors (the main ligand adenosine) and P2-purinoreceptors. P2Y are G-protein coupled receptors, while P2X receptors are ligand-operated ion channels (or ionotropic receptors). P2X receptors are important molecular therapeutic targets, the malfunctioning of which leads to serious complications in the physiology of humans and animals, and cause dangerous diseases. including neuroinflammation, hypoxia/ischemia, epilepsy and neuropathic pain et.al.

In this Special Issue, we wish to offer a platform for highquality publications on the latest advances on identification of P2X/Y and P1 (A1, A2A, A2B, A3) receptor blockers, functions, and regulation by them; the characterization of these receptor signaling networks and crosstalk; mechanisms underlying the role of purinoceptors in neurodegenerative illnesses as well as chronic neuronal changes following acute noxious damage; and therapeutic opportunities associated with regulation of purinergic receptor activity.









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Message from the Editor-in-Chief

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