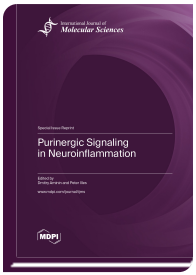
International Journal of
Molecular Sciences

IMPACT FACTOR 4.9
Indexed in: PubMed
CITESCORE 8.1

Special Issue Reprint

Purinergic Signaling in Neuroinflammation



www.mdpi.com/books/reprint/7312

Edited by
Dmitry Aminin
Peter Illes

ISBN 978-3-0365-7687-9 (Hardback)
ISBN 978-3-0365-7686-2 (PDF)

It is currently apparent that extracellular ATP's physiological effect is mediated by its interaction with specific purinergic receptors. All purinergic receptors are divided into P1-purinoreceptors and P2-purinoreceptors. Each of the subtypes is divided into a number of families. For instance, P2 receptors are divided into P2X and P2Y receptors according to the mechanism by which their effect is realized: P2Y are G-protein-coupled receptors, while P2X receptors are ligand-operated ion channels. P2X receptors are important molecular therapeutic targets, the malfunctioning of which leads to severe complications in the physiology of humans and animals and causes dangerous diseases. The search for compounds that can modulate the function of purinergic receptors can lead to the creation of new drugs that are effective in central and peripheral nervous system and immune system disease treatment, including neuroinflammation, hypoxia/ischemia, epilepsy and neuropathic pain. In this Special Issue, we wish to offer a platform for high-quality publications on the latest advances in the identification of P2X/Y- and P1-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.

MDPI

Order Your Print Copy
You can order print copies at
www.mdpi.com/books/reprint/7312

MDPI Books

Publishing Open Access Books & Series

MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.

Open Access

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.

Author Focus

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.

High Quality & Rapid Publication

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.

High Visibility

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).

Print on Demand and Multiple Formats

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.

MDPI AG
Grosspeteranlage 5
4052 Basel
Switzerland
Tel: +41 61 683 77 34
www.mdpi.com/books
books@mdpi.com