



an Open Access Journal by MDPI

MAPK-ERK Pathway

Guest Editor:

Prof. Dr. Jong-In Park

Department of Biochemistry,
Medical College of Wisconsin,
8701 Watertown Plank Road,
Milwaukee, WI 53226, USA

Deadline for manuscript
submissions:

closed (31 January 2021)

Message from the Guest Editor

The Raf/MEK/Extracellular signal-regulated kinase (ERK/MAPK) pathway is a highly specific three-layered kinase cascade that has pivotal roles in a variety of cellular processes, including cell cycle progression, survival, and differentiation. The kinase cascade of this pathway consists of the Ser/Thr kinases, A-Raf, B-Raf, and C-Raf-1, the highly homologous dual-specificity kinases, MEK1 and MEK2, and the ubiquitously expressed serine/threonine kinase, ERK1 and ERK2 (collectively referred to as ERK1/2). The specificity of pathway signaling is determined at multiple levels, including regulation of the magnitude and duration of pathway activity, spatio-temporal regulation, regulation of the monomeric vs. dimeric status of ERK1/2, as well as its crosstalk with other pathways. This Special Issue covers recent advances in the molecular mechanisms and biological functions of the ERK/MAPK pathway signaling, its regulators and downstream effectors, as well as the relevance of these aspects in human disease and potential therapeutic strategies. We encourage authors to submit original research articles or reviews.



mdpi.com/si/20727

Special Issue



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of
Odontostomatologic and
Specialized Clinical Sciences,
Sez-Biochimica, Faculty of
Medicine, Università Politecnica
delle Marche, Via Ranieri 65,
60100 Ancona, Italy

Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Inorganic Chemistry)

Contact Us

*International Journal of Molecular
Sciences* Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/ijms
ijms@mdpi.com
X@IJMS_MDPI