



an Open Access Journal by MDPI

Advance in Transcriptional Regulation by Conventional Metabolic Enzymes

Guest Editor:

Dr. Jae-Bong Park

Department of Biochemistry,
College of Medicine, Hallym
University, Chuncheon,
Kangwon-do, Republic of Korea

Deadline for manuscript
submissions:

closed (28 February 2023)

Message from the Guest Editor

Dear Colleagues,

Recently, many conventional metabolic enzymes are localized in nucleus, where they play novel non-conventional functions in nucleus including particularly transcriptional regulation through epigenetic modifications.

Pyruvate dehydrogenase complex (PDC) in nucleus can provide acetyl-coA, which is used for histone acetylation to regulate gene expression; Pyruvate kinase M2 (PKM2) in nucleus plays a conventional function to provide pyruvate, which is used for acetyl-CoA production to modify histone protein and a non-conventional function of protein kinase to phosphorylate histone protein and STAT3; Phosphofructokinase 1 (PFK1) binds to the transcriptional coactivator TEADS to stabilizes YAP/TAZ. PFK3B binds to Cdk1, cyclin D3 and Cdc25C. PFK1 product fructose-2,6-bisphosphate is used for the phosphorylation of p27 by Cdk1, undergoing p27 degradation.

In this Special Issue, we would like to publish new papers related to “Advance in Transcriptional Regulation by Conventional Metabolic Enzymes”.

- metabolic enzymes
- nuclear translocation
- transcriptional regulation
- epigenetic modification
- acetylation of DNA and histone
- methylation of DNA and histone



mdpi.com/si/91555

Special Issue



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Felipe Fregni

1. Neuromodulation Center and
Center for Clinical Research
Learning, Spaulding
Rehabilitation Hospital and
Massachusetts General Hospital,
Harvard Medical School, Boston,
MA 02114, USA
2. Department of Epidemiology,
Harvard T.H. Chan School of
Public Health, Boston, MA 02115,
USA

Message from the Editor-in-Chief

Biomedicines (ISSN 2227-9059) is an open access journal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to *Biomedicines*, be it original research, review articles, or developing Special Issues of current key topics.

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*, *CAPLus / SciFinder*, and other databases.

Journal Rank: JCR - Q1 (Pharmacology and Pharmacy) / CiteScore - Q2 (*Medicine (miscellaneous)*)

Contact Us

Biomedicines Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/biomedicines
biomedicines@mdpi.com
X@Biomed_MDPI