

Special Issue

Role of Phosphodiesterase in Biology and Pathology

Message from the Guest Editors

The Special Issue will publish the most exciting articles on the role of phosphodiesterases in health and disease. Phosphodiesterases are ubiquitous enzymes which hydrolyze cAMP and cGMP second messengers in a temporal, spatial, and integrated manner according to their expression and localization inside the cell. cAMP and cGMP signaling regulate a huge variety of cell functions; therefore, phosphodiesterases are involved in any aspect of cell biology. In recent years, further research has focused on the role of these proteins in compartmentalization of the cyclic nucleotide signal in a wide number of cell models. The understanding of cell signaling pathways in which phosphodiesterases are involved is of great importance in cell physiology and human pathology. A great number of pharmaceutical inhibitors are available, and over the past few decades, they have been successfully used in the treatment of impotence and chronic pulmonary diseases. New evidence underlines a possible use of phosphodiesterase inhibitors in the treatment of cardiovascular diseases, type 2 diabetes, cancer, inflammation, and many more other pathologies which have recently been identified.

Guest Editors

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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.

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