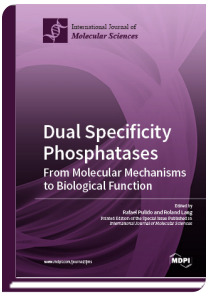
International Journal of
Molecular Sciences

IMPACT FACTOR 5.923

Covered in: PubMed

Special Issue Reprint

Dual Specificity Phosphatases



Edited By:
Rafael Pulido
Roland Lang
mdpi.com/books/pdfview/book/1856

ISBN 978-3-03921-688-8 (Pbk)
ISBN 978-3-03921-689-5 (PDF)

Dual specificity phosphatases (DUSPs) constitute a heterogeneous group of protein tyrosine phosphatases with the ability to dephosphorylate Ser/Thr and Tyr residues from proteins, as well as from other non-proteinaceous substrates including signaling lipids. DUSPs include, among others, MAP kinase (MAPK) phosphatases (MKPs) and small-size atypical DUSPs. MKPs are enzymes specialized in regulating the activity and subcellular location of MAPKs, whereas the function of small-size atypical DUSPs seems to be more diverse. DUSPs have emerged as key players in the regulation of cell growth, differentiation, stress response, and apoptosis. DUSPs regulate essential physiological processes, including immunity, neurobiology and metabolic homeostasis, and have been implicated in tumorigenesis, pathological inflammation and metabolic disorders. Accordingly, alterations in the expression or function of MKPs and small-size atypical DUSPs have consequences essential to human disease, making these enzymes potential biological markers and therapeutic targets. This Special Issue covers recent advances in the molecular mechanisms and biological functions of MKPs and small-size atypical DUSPs, and their relevance in human disease.

MDPI

Order Your Print Copy
Print copies (170x244mm, Pbk) can be ordered at:
www.mdpi.com/books/pdfview/book/1856

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), 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 off ers a sustainable, cost-eff ective and fast way to publish MDPI Books printed versions.

MDPI
St. Alban-Anlage 66
4052 Basel, Switzerland
Tel: +41 61 683 77 34
Fax: +41 61 302 89 18
www.mdpi.com
books@mdpi.com