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ABSTRACTED/INDEXED IN Chemical Abstracts and the CAS databases; EBSCO - Academic Search; Scopus.

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ISSN 1868-5021· e-ISSN 1868-503X· CODEN BCIOB8

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TYPESETTING Compuscript Ltd., Shannon, Ireland

PRINTING Franz X. Stückle Druck und Verlag e.K., Ettenheim
Printed in Germany

COVER ILLUSTRATION

Metallothioneins (MTs) are a family of polymorphic, small cystein-rich proteins with an optimal capacity for metal ion coordination. They take part in a great variety of metal ion-related events, from detoxification to homeostasis, storage and delivery, in all kind of organisms. In mammals, MTs have also been associated with a wide range of stress responses in different pathological processes: tumorigenesis, neurodegeneration and inflammation. The information on both intra- and extracellular interactions of MTs with other proteins is comprehensively reviewed in the article by Atrian and Capdevila on pp. 143–160 in this issue. Especially significant are the identified mammalian MT interactions, since most of them concern partners within the central nervous system (mainly brain), both through physical contact or metal exchange reactions. The image shown on the cover represents the three-dimensional structure and amino acid sequence of the rat Zn_2Cd_5 -MT2 complex (drawn from PDB 4MT2 coordinates), and is a courtesy of Òscar Palacios, member of M. Capdevila's group at the Universitat Autònoma de Barcelona, Spain.



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