

Contents: The Journal of Cell Biology

Volume 131, Number 2, October 1995

Mini-review

- 275 Adam, a novel family of membrane proteins containing a disintegrin and metalloprotease domain: Multipotential functions in cell-cell and cell-matrix interactions.

T. G. Wolfsberg, P. Primakoff, D. G. Myles, and J. M. White

Regular Articles

- 279 A three-dimensional structural dissection of *Drosophila* polytene chromosomes.

Y. Urata, S. J. Parmelee, D. A. Agard, and J. W. Sedat

- 297 Parallel secretory pathways to the cell surface in yeast.

E. Harsay and A. Bretscher

- 311 Yeast SEC16 gene encodes a multidomain vesicle coat protein that interacts with Sec23p.

P. Espenshade, R. E. Gimeno, E. Holzmacher, P. Teung, and C. A. Kaiser

- 325 SED4 encodes a yeast endoplasmic reticulum protein that binds Sec16p and participates in vesicle formation.

R. E. Gimeno, P. Espenshade, and C. A. Kaiser

- 339 Envelope glycoprotein interactions in coronavirus assembly.

D.-J. E. Opstelten, M. J. B. Raamsman, K. Wolfs, M. C. Horzinek, and P. J. M. Rottier

- 351 A lysosomal targeting signal in the cytoplasmic tail of the β chain directs HLA-DM to MHC class II compartments.

M. S. Marks, P. A. Roche, E. van Donselaar, L. Woodruff, P. J. Peters, and J. S. Bonifacino

- 371 The essential OST2 gene encodes the 16-kD subunit of the yeast oligosaccharyltransferase, a highly conserved protein expressed in diverse eukaryotic organisms.

S. Silberstein, P. G. Collins, D. J. Kelleher, and R. Gilmore

- 385 Sequences, structural models, and cellular localization of the actin-related proteins Arp2 and Arp3 from *Acanthamoeba*.

J. F. Kelleher, S. J. Atkinson, and T. D. Pollard

- 399 The 78,000- M_r intermediate chain of *Chlamydomonas* outer arm dynein is a microtubule-binding protein.

S. M. King, R. S. Patel-King, C. G. Wilkerson, and G. B. Witman

- 411 Regulation of cytoplasmic dynein function in vivo by the *Drosophila* glued complex.

M. McGrail, J. Gepner, A. Silvanovich, S. Ludmann, M. Serr, and T. S. Hays

- 427 Mutational analysis of the phototransduction pathway of *Chlamydomonas reinhardtii*.

G. J. Pazour, O. A. Sineshchekov, and G. B. Witman

- 441 Immobilization of nicotinic acetylcholine receptors in mouse C2 myotubes by agrin-induced protein tyrosine phosphorylation.

T. Meier, G. M. Perez, and B. G. Wallace

- 453 Rapid, widespread, and longlasting induction of nestin contributes to the generation of glial scar tissue after CNS injury.

J. Frisén, C. B. Johansson, C. Török, M. Risling, and U. Lendahl

- 465 Protein zero, a nervous system adhesion molecule, triggers epithelial reversion in host carcinoma cells.

J. P. Doyle, J. G. Stempak, P. Cowin, D. R. Colman, and D. D'Urso

- 483 Osteogenic differentiation of hypertrophic chondrocytes involves asymmetric cell divisions and apoptosis.

H. I. Roach, J. Erenpreisa, and T. Aigner

- 495 Chemokines regulate cellular polarization and adhesion receptor redistribution during lymphocyte interaction with endothelium and extracellular matrix. Involvement of cAMP signaling pathway.

M. A. del Pozo, P. Sánchez-Mateos, M. Nieto, and F. Sánchez-Madrid

Contents continued

Cover picture: Ribbon diagrams (*upper row*) and Van der Waals surface representations (*lower*) of actin (*left*) and model structures of *Acanthamoeba* Arp2 (*center*) and Arp3 (*right*) colored by amino acid conservation. All structures are in approximately identical orientation. Color code: residues identical to actin are *blue*; conservative substitutions are *green*; nonconservative substitutions are *yellow*; insertions are *red*. Models were constructed interactively with the program CHAIN and energy minimized with the program X-PLOR. Figures were composed with SETOR. See related article in this issue by Kelleher et al., 385-397.

509 **Detachment of cultured cells from the substratum induced by the neutrophil-derived oxidant NH₂Cl: Synergistic role of phosphotyrosine and intracellular Ca²⁺ concentration.**

T. Y. Nakamura, I. Yamamoto, H. Nishitani, T. Matozaki, T. Suzuki, S. Wakabayashi, M. Shigekawa, and K. Goshima

525 **Tyrosine phosphorylation and cytoskeletal tension regulate the release of fibroblast adhesions.**

E. Crowley and A. F. Horwitz

539 **Dual role for the latent transforming growth factor- β binding protein in storage of latent TGF- β in the extracellular matrix and as a structural matrix protein.**

S. L. Dallas, K. Miyazono, T. M. Skerry, G. R. Mundy, and L. F. Bonewald

551 **Immunohistochemical and mutation analyses demonstrate that procollagen VII is processed to collagen VII through removal of the NC-2 domain.**

L. Bruckner-Tuderman, Ø. Nilssen, D. R. Zimmermann, M. T. Dours-Zimmermann, D. U. Kalinke, T. Gedde-Dahl, Jr., and J.-O. Winberg

561 **ADDITIONS AND CORRECTIONS**