



**Cover:** Deubiquitylation in nucleoli. Immunofluorescence staining of HeLa cells for a deubiquitylating enzyme USP36 (red), microtubules (green) and nuclei (blue). USP36 localizes to nucleoli, a site of ribosome biogenesis in nuclei, and regulates the structure and function of the subnuclear compartment. See article by A. Endo et al. (pp. 678-686).

### Commentaries

- 577 **A nuclear-envelope bridge positions nuclei and moves chromosomes.** Starr, D. A.
- 587 **Ran on tracks – cytoplasmic roles for a nuclear regulator.** Yudin, D. and Fainzilber, M.

### Short Report

- 595 **Expression of the proneural gene encoding Mash1 suppresses MYCN mitotic activity.** Álvarez-Rodríguez, R. and Pons, S.

### Research Articles

- 600 **Physical transfer of membrane and cytoplasmic components as a general mechanism of cell-cell communication.** Niu, X., Gupta, K., Yang, J. T., Shablott, M. J. and Levchenko, A.
- 611 **Functional interactions between the ciliopathy-associated Meckel syndrome 1 (MKS1) protein and two novel MKS1-related (MKSR) proteins.** Bialas, N. J., Inglis, P. N., Li, C., Robinson, J. F., Parker, J. D. K., Healey, M. P., Davis, E. E., Inglis, C. D., Toivonen, T., Cottell, D. C., Blacque, O. E., Quarmby, L. M., Katsanis, N. and Leroux, M. R.
- 625 **A signal comprising a basic cluster and an amphipathic  $\alpha$ -helix interacts with lipids and is required for the transport of Ist2 to the yeast cortical ER.** Maass, K., Fischer, M. A., Seiler, M., Temmerman, K., Nickel, W. and Sedorf, M.
- 636 **Ancient animal ancestry for nuclear myosin.** Hofmann, W. A., Richards, T. A. and de Lanerolle, P.
- 644 **Dynamic release of nuclear RanGTP triggers TPX2-dependent microtubule assembly during the apoptotic execution phase.** Moss, D. K., Wilde, A. and Lane, J. D.
- 656 **Dynamic conformational changes in the FERM domain of FAK are involved in focal-adhesion behavior during cell spreading and motility.** Papusheva, E., Mello de Queiroz, F., Dalous, J., Han, Y., Esposito, A., Jares-Erijman, E. A., Jovin, T. M. and Bunt, G.
- 667 **Human protein arginine methyltransferases in vivo – distinct properties of eight canonical members of the PRMT family.** Herrmann, F., Pably, P., Eckerich, C., Bedford, M. T. and Fackelmayer, F. O.

- 678 **Nucleolar structure and function are regulated by the deubiquitylating enzyme USP36.** Endo, A., Matsumoto, M., Inada, T., Yamamoto, A., Nakayama, K. I., Kitamura, N. and Komada, M.
- 687 **Apical membrane maturation and cellular rosette formation during morphogenesis of the zebrafish lateral line.** Hava, D., Forster, U., Matsuda, M., Cui, S., Link, B. A., Eichhorst, J., Wiesner, B., Chitnis, A. and Abdelilah-Seyfried, S.
- 696 ***Yersinia enterocolitica* differentially modulates RhoG activity in host cells.** Roppenser, B., Röder, A., Hentschke, M., Ruckdeschel, K. and Aepfelbacher, M.
- 706 **Whi2p links nutritional sensing to actin-dependent Ras-cAMP-PKA regulation and apoptosis in yeast.** Leadsham, J. E., Miller, K., Ayscough, K. R., Colombo, S., Martegani, E., Sudbery, P. and Gourlay, C. W.
- 716 **Akt promotes BMP2-mediated osteoblast differentiation and bone development.** Mukherjee, A. and Rotwein, P.
- 727 **A common trafficking route for GLUT4 in cardiomyocytes in response to insulin, contraction and energy-status signalling.** Fazakerley, D. J., Lawrence, S. P., Lizunov, V. A., Cushman, S. W. and Holman, G. D.
- 735 **The function of glutamatergic synapses is not perturbed by severe knockdown of 4.1N and 4.1G expression.** Wozny, C., Breustedt, J., Wolk, F., Varoqueaux, F., Boretius, S., Zivkovic, A. R., Neeb, A., Frahm, J., Schmitz, D., Brose, N. and Ivanovic, A.

### Author Correction

- 745 **Rolling blackout is required for bulk endocytosis in non-neuronal cells and neuronal synapses.** Vijaykrishnan, N., Woodruff, E. A., III and Broadie, K.