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Cover: DAPI-stained dividing Euplotes aediculatus cell showing the large dividing macronucleus. This ciliated protozoa contains two types of nuclei within one cell: a large DNA-rich macronucleus and diploid micronuclei. The DNA in the macronucleus occurs in short 'gene-sized' DNA molecules, each of which is terminated by telomeric sequences. Owing to the high concentration of telomeres in its macronucleus, the E. aediculatus cell is an attractive model system in which to study telomere structure and telomere replication. M. Möllenbeck et al. (pp. 1757-1761) report that the biological function of a telomerase-associated protein is to anchor the enzyme in the replication factory of the macronucleus. This is the first study of the biological function of a telomerase-associated protein outside veast.

Cell Science at a Glance

1647 Epithelial-mesenchymal signalling regulating tooth morphogenesis. Thesleff, I.

Book Reviews

- 1649 A Biologist's Guide to Analysis of DNA Microarray Data, by S. Knudsen. Fan, B. J. and Leung, Y. F.
- 1650 Drosophila Eye Development, edited by K. Moses. Bray, S. and Johnson, R.

Commentaries

- 1653 The complex life of WT1. Wagner, K.-D., Wagner, N. and Schedl, A.
- 1659 Stem cell regulation in the shoot meristem. Groß-Hardt, R. and Laux, T.

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Research Articles

- 1667 Nucleolar association of pEg7 and XCAP-E, two members of Xenopus laevis condensin complex in interphase cells. Uzbekov, R., Timirbulatova, E., Watrin, E., Cubizolles, F., Ogereau, D., Gulak, P., Legagneux, V., Polyakov, V. Ju., Le Guellec, K. and Kireev, I.
- 1679 Mouse Apg16L, a novel WD-repeat protein, targets to the autophagic isolation membrane with the Apg12-Apg5 conjugate. Mizushima, N., Kuma, A., Kobayashi, Y., Yamamoto, A., Matsubae, M., Takao, T., Natsume, T., Ohsumi, Y. and Yoshimori, T.
- 1689 The endo- β -1,3-glucanase eng1p is required for dissolution of the primary septum during cell separation in
- Schizosaccharomyces pombe. Martín-Cuadrado, A. B., Dueñas, E., Sipiczki, M., Vázquez de Aldana, C. R. and del Rey, F.
- 1699 Sphingosine-1-phosphate decreases melanin synthesis via sustained ERK activation and subsequent MITF degradation. Kim, D.-S., Hwang, E.-S., Lee, J.-E., Kim, S.-Y., Kwon, S.-B. and Park, K.-C.
- 1707 Accumulation of c-Myc and proteasomes at the nucleoli of cells containing elevated c-Myc protein levels. Arabi, A., Rustum, C., Hallberg, E. and Wright, A. P. H.
- 1719 Linear element formation and their role in meiotic sister chromatid cohesion and chromosome pairing. Molnar, M., Doll, E., Yamamoto, A., Hiraoka, Y. and Kohli, J.
- 1733 The *Drosophila* EAST protein associates with a nuclear remnant during mitosis and constrains chromosome mobility. Wasser, M. and Chia, W.
- 1745 The formin-homology-domain-containing protein FHOD1 enhances cell migration. Koka, S., Neudauer, C. L., Li, X., Lewis, R. E., McCarthy, J. B. and Westendorf, J. J.
- 1757 The telomerase-associated protein p43 is involved in anchoring telomerase in the nucleus. Möllenbeck, M., Postberg, J., Paeschke, K., Rossbach, M., Jönsson, F. and Lipps, H. J.

- 1763 Furin interacts with proMT1-MMP and integrin αV at specialized domains of renal cell plasma membrane. Mayer, G., Boileau, G. and Bendayan, M.
- 1775 Isolation of hepatoblasts based on the expression of Dlk/ Pref-1. Tanimizu, N., Nishikawa, M., Saito, H., Tsujimura, T. and Miyajima, A.
- 1787 Global amplification polymerase chain reaction reveals novel transitional stages during osteoprogenitor differentiation.

 Liu, F., Malaval, L. and Aubin, J. E.
- 1797 Modeling human peroxisome biogenesis disorders in the nematode *Caenorhabditis elegans*. Thieringer, H., Moellers, B., Dodt, G., Kunau, W.-H. and Driscoll, M.
- 1805 Dynamic association of RNA-editing enzymes with the nucleolus. Desterro, J. M. P., Keegan, L. P., Lafarga, M., Berciano, M. T., O'Connell, M. and Carmo-Fonseca, M.
- 1819 HIF-1α controls extracellular matrix synthesis by epiphyseal chondrocytes. Pfander, D., Cramer, T., Schipani, E. and Johnson, R. S.
- 1827 Molecular and cellular characterisation of highly purified stromal stem cells derived from human bone marrow. Gronthos, S., Zannettino, A. C. W., Hay, S. J., Shi, S., Graves, S. E., Kortesidis, A. and Simmons, P. J.
- 1837 Permeabilization in a cerebral endothelial barrier model by pertussis toxin involves the PKC effector pathway and is abolished by elevated levels of cAMP. Brückener, K. E., el Bayâ, A., Galla, H.-J. and Schmidt, M. A.
- The intracellular localisation of TAF7L, a paralogue of transcription factor TFIID subunit TAF7, is developmentally regulated during male germ-cell differentiation.
 Pointud, J.-C., Mengus, G., Brancorsini, S., Monaco, L., Parvinen, M., Sassone-Corsi, P. and Davidson, I.

