Contents
Volume 111 (2) 1991

Patterns of epithelial expression of Fos protein suggest important role in the transition from viable to cornified cell during keratinization 253

Wiles, M. V. and Keller G.
Multiple hematopoietic lineages develop from embryonic stem (ES) cells in culture 259

The homeobox gene Hox 7.1 has specific regional and temporal expression patterns during early murine craniofacial embryogenesis, especially tooth development in vivo and in vitro 269

Davis, C. A., Holmyard, D. P., Millen, K. J. and Joyner, A. L.
Examining pattern formation in mouse, chicken and frog embryos with an En-specific antiserum 287

In situ localization of storage protein mRNAs in developing meristems of Brassica napus embryos 299

Ginsberg, D., DeSimone, D. and Geiger, B.
Expression of a novel cadherin (EP-cadherin) in unfertilized eggs and early Xenopus embryos 315

Takahashi, Y. and Nogawa, H.
Branching morphogenesis of mouse salivary epithelium in basement membrane-like substratum separated from mesenchyme by the membrane filter 327

Shi, X., Lu, L., Qiu, Z., He, W. and Frankel, J.
Microsurgically generated discontinuities provoke heritable changes in cellular handedness of a ciliate, Styloynchia mytilus 337

Boulter, C. A., Aguzzi, A., Williams, R. L., Wagner, E. F., Evans, M. J. and Beddington, R.
Expression of v-src induces aberrant development and twinning in chimaeric mice 357

Eldon, E. D. and Pirrotta, V.
Interactions of the Drosophila gap gene giant with maternal and zygotic pattern-forming genes 367

Yasuda, G. K., Baker, J. and Schubiger, G.
Independent roles of centrosomes and DNA in organizing the Drosophila cytoskeleton 379

Boulet, A. M., Lloyd, A. and Sakonju, S.
Molecular definition of the morphogenetic and regulatory functions and the cis-regulatory elements of the Drosophila Abd-B homeotic gene 393

Irvine, K. D., Helfand, S. L. and Hogness, D. S.
The large upstream control region of the Drosophila homeotic gene Ultrabithorax 407

Swalla, B. J., Badgett, M. R. and Jeffery, W. R.
Identification of a cytoskeletal protein localized in the myoplasm of ascidian eggs: localization is modified during anural development 425

Sánchez-Herrero, E.
Control of the expression of the bithorax complex genes abdominal-A and Abdominal-B by cis-regulatory regions in Drosophila embryos 437

Lyons, G. E., Buckingham, M. E. and Mannherz, H. G.
α-actin proteins and gene transcripts are colocalized in embryonic mouse muscle 451

Wanaka, A., Milbrandt, J. and Johnson, E. M.
Expression of FGF receptor gene in rat development 455

Drysdale, T. A. and Elinson, R. P.
Development of the Xenopus laevis hatching gland and its relationship to surface ectoderm patterning 469

Perkins, A. S., Mercer, J. A., Jenkins, N. A. and Copeland, N. G.
Patterns of Evi-1 expression in embryonic and adult tissues suggest that Evi-1 plays an important regulatory role in the mouse development 479

Brown, R. and Brockes, J. P.
Identification and expression of a regeneration-specific homeobox gene in the newt limb blastema 489

Ferretti, P., Brockes, J. P. and Brown, R.
A newt type II keratin restricted to normal and regeneration limbs and tails is responsive to retinoic acid 497

Minkoff, R., Parker, S. B. and Hertzberg, E. L.
Analysis of distribution patterns of gap junctions during development of embryonic chick facial primordia and brain 509

Godsave, S. F. and Slack, J. M. W.
Single cell analysis of mesoderm formation in the Xenopus embryo 523
Contents

Jones, C. M., Lyons, K. M. and Hogan, B. L. M.
Involvement of Bone Morphogenetic Protein-4 (BMP-4) and Vgr-1 in morphogenesis and neurogenesis in the mouse 531

Miwa, Y., Atsumi, T., Imai, N. and Ikawa, Y.
Primitive erythropoiesis of mouse teratocarcinoma stem cells PCC3/A/1 in serum-free medium 543

Hopwood, N. D., Pluck, A. and Gurdon, J. B.
Xenopus Myf-5 marks early muscle cells and can activate muscle genes ectopically in early embryos 551

Mazarakis, N. D., Nelki, D., Lyon, M. F., Ruddy, S., Evans, E. P., Freemont, P. and Dudley, K.
Isolation and characterisation of a testis-expressed developmentally regulated gene from the distal inversion of the mouse t-complex 561

Sasaki, H., Hamada, T., Ueda, T., Seki, R., Higashinakagawa, T. and Sakaki, Y.
Inherited type of allelic methylation variations in a mouse chromosome region where an integrated transgene shows methylation imprinting 573

Perris, R., Krotoski, D., Lallier, T., Domingo, C., Sorrell, J. M. and Bronner-Fraser, M.
Spatial and temporal changes in the distribution of proteoglycans during avian neural crest development 583

Kraut, R. and Levine, M.
Spatial regulation of the gap gene giant during Drosophila development 601

Kraut, R. and Levine, M.
Mutually repressive interactions between the gap genes giant and Krüppel define middle body regions of the Drosophila embryo 611

Kelso-Winemiller, L. C. and Winkler, M. M.
‘Unmasking’ of stored maternal mRNAs and the activation of protein synthesis at fertilization in sea urchins 623

Stocker, K. M., Sherman, L., Rees, S. and Ciment, G.
Basic FGF and TGF-β1 influence commitment to melanogenesis in neural-crest-derived cells of avian embryos 635