

## 6 Literaturnachweis

- 1 Hastie, N.D. (1994) The genetics of Wilms' tumor - a case of disrupted development. *Annu. Rev. Genet.* 28, 523-558
- 2 Call, K.M., Galser, T., Ito, C.Y. et al. (1990) Isolation and characterization of a zinc finger polypeptide gene at the human chromosome 11 Wilms' tumor locus. *Cell* 60, 509-520
- 3 Gessler, M., Poustka, A., Cavenee, W., Neve, R.L., Orkin, S.H., Bruns, G.A.P. (1990) Homozygous deletion in Wilms' tumours of a gene identified by chromosome jumping. *Nature* 343, 774-778
- 4 Scharnhorst, V., van der Eb, A., Jochemsen, A.G. (2001) WT1 proteins: functions in growth and differentiation. *Gene* 273, 141-161
- 5 Knudson, A.G. (1996) Hereditary cancer: two hits revisited. *J. Cancer Res. Clin. Oncol.* 122(3), 135-140
- 6 Rauscher, F.J. 3rd, Morris, J.F., Tournay, O.E., et al. (1990) Binding of the Wilms' tumor locus zinc finger protein to the EGR-1 consensus sequence. *Science* 250, 1259-1262
- 7 Wang, Z.Y., Qiu, Q.Q., Enger, K.T., Deuel, T.F. (1993) A second transcriptionally active DNA-binding site for the Wilms' tumor gene product. *Wt1. Proc. Natl. Acad. Sci. USA* 90, 8896-8900
- 8 Drummond, I.A., Madden, S.L., Rohwer-Nutter, P., Bell, G.I., Sukhatme, V.P. (1994) Repression of the insulin-like growth factor II gene by the Wilms' tumor suppressor WT1. *Science* 257, 674-678
- 9 English, M. A., Licht, J. D. (1999) Tumor-associated WT1 missense mutants indicate that transcriptional activation by WT1 is critical for growth control. *J. Biol. Chem.* 274, 13258-13263
- 10 Maheswaran, S., Park, S., Bernard, A. et al. (1993) Physical and functional interaction between WT1 and p53 proteins. *Proc. Natl. Acad. Sci. USA* 90, 5100-5104
- 11 Lee, S.B., Haber, D.A. (2001) Wilms tumor and the WT1 gene. *Exp. Cell Res.* 264, 74-99
- 12 Haber, D.A., Sohn, R.L., Buckler, A.J., et al. (1991) Alternative splicing and genomic structure of the Wilms tumor gene WT1. *Proc. Natl. Acad. Sci. U.S.A.* 88, 9618-9622

- 13 Bickmore, W.A., Oghene, K., Little, M.H. et al. (1992) Modulation of DNA binding specificity by alternative splicing of the Wilms tumor wt1 gene transcript. *Science* 257, 235-237
- 14 Laity, J.H., Dyson, H.J., Wright, P.E. (2000) Molecular basis for modulation of biological function by alternate splicing of the Wilms. tumor suppressor protein. *Proc. Natl. Acad. Sci. USA* 97, 11932-11935
- 15 Davies, R.C., Calvio, C., Bratt, E. et al. (1998) WT1 interacts with the splicing factor U2AF65 in an isoform-dependent manner and can be incorporated into spliceosomes. *Genes Dev.* 12, 3217-3225
- 16 Englert, C., Vidal, M., Maheswaran, S., et al.(1995) Truncated WT1 mutants alter the subnuclear localization of the wild-type protein. *Proc. Natl. Acad. Sci. USA* 92, 11960-11964
- 17 Larsson, S.H., Charlieu, J.P., Miyagawa, K., et al. (1995) Subnuclear localization of WT1 in splicing or transcription factor domains is regulated by alternative splicing. *Cell* 81, 391-401
- 18 Lodomery, M.R., Slight J., Mc Ghee, S., Hastie, N.D. (1999) Presence of WT1, the Wilms-tumor suppressor gene product, in nuclear poly(A)(+) ribonucleoprotein. *J. Biol. Chem.* 274, 36520-36526
- 19 Hammes, A., Guo, J.K., Lutsch, G. et al. (2001) Two splice variants of the Wilms' tumor 1 gene have distinct functions during sex determination and nephron formation. *Cell* 106, 319-329
- 20 Natoli, T.A., McDonald, A., Alberta, J.A., Taglienti, M.E., Housman, D.E., Kreidberg, J.A. (2002) A mammal-specific exon of WT1 is not required for development or fertility. *Mol Cell Biol.* 22(12), 4433-4438
- 21 Scholz, H, Kirschner, K.M. (2005) A role for the Wilms' tumor protein WT1 in organ development. *Physiology* 20, 54-59
- 22 Pritchard-Jones, K., Flemming, S., Davidson, D. et al. (1990) The candidate Wilms' tumour gene is involved in genitourinary development. *Nature* 346, 194-197
- 23 Pelletier, J., Schalling, M., Buckler, A. et al. (1991) Expression of the Wilms' tumor gene *Wt1* in the murine urogenital system. *Genes Dev.* 5, 1345-1356
- 24 Armstrong, J.F., Pritchard-Jones, K., Bickmore, W.A. et al. (1993) The expression of the Wilms' tumor gene, WT1, in the developing mammalian embryo. *Mech. Dev.* 40, 85-97

- 25 Rackley, R.R., Flenniken, A.M., Kuriyan, N.P et al (1993) Expression of the Wilms. tumor suppressor gene *Wt1* during mouse embryogenesis. *Cell Growth Differ.* 4, 1023-1031
- 26 Kreidberg, J.A., Sariola, H., Loring, J.M et al. (1993) *WT-1* is required for early kidney development. *Cell* 74, 679-691
- 27 Herzer, U., Crocoll, A., Barton, D., Howells, N., Englert, C. (1999) The Wilms tumor suppressor gene *Wt1* is required for development of the spleen. *Curr. Biol.* 9, 837-840
- 28 Moore, A.W., McInnes, L., Kreidberg, J., et al (1999) YAC complementation shows a requirement for *Wt1* in the development of epicardium, adrenal gland and throughout nephrogenesis. *Development* 126, 1845-1857
- 29 Moore, A., Schedl, A., McInnes, L et al (1998) YAC analysis reveals Wilms' tumor 1 gene activity in the proliferating coelomic epithelium, developing diaphragm and limb. *Mech. Dev.* 79, 169-184
- 30 Wagner, K.D., Wagner, N., Vidal, V.P. et al. (2002) The Wilms' tumor gene *Wt1* is required for normal development of the retina. *EMBO J* 21, 1398-1405
- 31 Wagner, K.D., Wagner, N., Schley, G., Theres, H., Scholz, H. (2003) The Wilms' tumor suppressor *Wt1* encodes a transcriptional activator of the class IV POU-domain factor *Pou4f2* (*Brn-3b*). *Gene* 305(2), 217-223
- 32 Wagner, N., Wagner, K.D., Hammes, A. et al. (2005) A splice variant of the Wilms' tumour suppressor *Wt1* is required for normal development of the olfactory system. *Development.* 132(6), 1327-1336
- 33 Carmona, R., González-Iriarte, M., Pérez-Pomarez, J.M. et al. (2001) Localization of the Wilms. tumor protein *WT1* in avian embryo. *Cell Tissue Res.* 303, 173-18625
- 34 Stuckmann, I., Evans, S., Lassar, A.B. (2003) Erythropoietin and retinoic acid, secreted from the epicardium, are required for cardiac myocyte proliferation. *Dev Biol* 255, 334–349
- 35 Wu, H., Lee, S.H., Gao, J., Liu, X., Iruela-Arispe, M.J. (1999) Inactivation of erythropoietin leads to defects in cardiac morphogenesis. *Development* 126(16), 3597-3605
- 36 Kastner, P., Grondona, J.M., Mark, M. et al. (1994) Genetic analysis of *RXR* alpha developmental function: convergence of *RXR* and *RAR* signaling pathways in heart and eye morphogenesis. *Cell* 78(6), 987-1003

- 37 Dettman, R.W., Denetclaw, W.J., Ordahl, C.P. et al. (1998) Common epicardial origin of coronary vascular smooth muscle, perivascular fibroblasts, and intermyocardial fibroblasts in the avian heart. *Dev. Biol.* 193, 169-181
- 38 Vrancken Peeters, M.P.F.M., Gittenberger-de Groot, A.C. et al. (1999) Smooth muscle cells and fibroblasts of the coronary arteries derive from epithelial-mesenchymal transformation of the epicardium. *Anat. Embryol.* 199, 367-378
- 39 Mikawa, T., Gourdie, R.G. (1996) Pericardial mesoderm generates a population of coronary smooth muscle cells migrating into the heart along with ingrowth of the epicardial organ. *Dev. Biol.* 174, 221-232
- 40 Pérez-Pomarez, J.M., Macias, D., Garcia-Garrido, L. et al. (1998) The origin of the subepicardial mesenchyme in the avian embryo: an immunohistochemical and quail-chick chimera study. *Dev. Biol.* 200, 57-68
- 41 Silver, M.A. (2006) The natriuretic peptide system: kidney and cardiovascular effects. *Curr. Opin. Nephrol. Hypertens.* 15(1), 14-21
- 42 Ghatpande, S., Goswami, S., Mascareno, E., Siddiqui, M.A. (1999) Signal transduction and transcriptional activation in embryonic heart development and during myocardial hypertrophy. *Mol. Cell. Biochem.* 196, 93-97
- 43 Bohlender, J., Fukamizu, A., Lippoldt, A. et al. (1997) High human renin hypertension in transgenic rats. *Hypertension* 29, 428-434
- 44 Maxwell, P.H. (2005) Hypoxia-inducible factor as a physiological regulator. *Exp. Physiol.* 90(6): 791-797
- 45 Wagner, K.D., Geil, D., Schimke, I. et al. (1998) Decreased susceptibility of contractile function to hypoxia/reoxygenation in chronic infarcted rat hearts. *J. Mol. Cell. Cardiol.* 30, 2341-2353
- 46 Sharma, P.M., Yang, X., Bowman, M., et al. (1992) Molecular cloning of rat Wilms' tumor complementary DNA and a study of messenger RNA expression in the urogenital system and the brain. *Cancer Res.* 52, 6407-6412
- 47 Braissant, O., Wahli, W. (1998) A simplified in situ hybridization protocol using nonradioactively labeled probes to detect abundant and rare mRNAs on tissue sections. *Biochemica* 1, 10-16
- 48 Kreuzer, K.A., Saborowski, A., Lupberger, J., et al. (2001) Fluorescent 5'-exonuclease assay for the absolute quantification of Wilms' tumor gene (WT1) mRNA: implications for monitoring human leukaemias. *Br. J. Haematol.* 114, 313-318

- 49 Wellmann, S., Taube, T., Paal, K., et al. (2001) Specific reverse transcription-PCR quantification of vascular endothelial growth factor (VEGF) splice variants by light cycler technology. *Clin. Chem.* 47, 654-660
- 50 Wang, G. L., Semenza, G. L. (1995) Purification and characterization of hypoxia-inducible factor 1. *J. Biol. Chem.* 270, 1230-1237
- 51 Pinter, E., Barreuther, M., Lu, T. et al. (1997) Platelet-endothelial cell adhesion molecule-1 (PECAM-1/CD31) tyrosine phosphorylation state changes during vasculogenesis in the murine conceptus. *Am. J. Pathol.* 150, 1523-1530
- 52 DeLisser, H.M., Christofidou-Solomidou, M., Strieter, R.M. et al. (1997) Involvement of endothelial PECAM-1/CD31 in angiogenesis. *Am. J. Pathol.* 151, 671-677
- 53 Sheibani, N., Frazier, W.A. (1999) Thrombospondin-1, PECAM-1, and regulation of angiogenesis. *Histol. Histopathol.* 14, 185-294
- 54 Tio, R.A., Tkebuchava, T., Scheuermann, T.H. et al. (1999) Intramyocardial gene therapy with naked DNA encoding vascular endothelial growth factor improves collateral flow to ischemic myocardium. *Hum. Gene Ther.* 10, 2953-2960
- 55 Su, H., Lu, R., Kan, Y.W. (2000) Adeno-associated viral vector-mediated vascular endothelial growth factor gene transfer induces neovascular formation in ischemic heart. *Proc. Nat. Acad. Sci. USA* 97, 13801-13806
- 56 Matsunaga, T., Wartier, D.C., Weihrauch, D.W., Moniz, M., Tessmer, J., Chilian, W.M. (2000) Ischemia-induced coronary collateral growth is dependent on vascular endothelial growth factor and nitric oxide. *Circulation* 102, 3098-3103.
- 57 Wagner, K.D., Wagner, N., Wellmann, S. et al. (2003) Oxygen-regulated expression of the Wilms' tumor suppressor WT1 involves hypoxia-inducible factor-1 (HIF-1). *FASEB J.* 17, 1364-1366
- 58 Ivan, M., Kondo, K., Yang, H. et al. (2001) HIF $\alpha$  targeted for VHL-mediated destruction by proline hydroxylation: implications for O<sub>2</sub> sensing. *Science* 292, 464-468
- 59 Jaakola, P., Mole, D.R., Tian, Y.M. et al. (2001) Targeting of HIF-1 $\alpha$  to the von Hippel-Lindau ubiquitylation complex by O<sub>2</sub>-regulated prolyl hydroxylation. *Science* 292, 468-472

- 60 Männer, J., Pérez-Pomares, J.M., Marcias, D., Muñoz-Chápuli, R. (2001) The origin, formation and developmental significance of the epicardium: A review. *Cells Tissues Organs* 169, 89-103
- 61 Olivey, H.E., Compton, L.A., Barnett, J.V. (2004) Coronary vessel development: the epicardium delivers. *Trends Cardiovasc. Med.* 14, 247-251
- 62 Wagner N, Wagner KD, Theres H et al. (2005) Coronary vessel development requires activation of the TrkB neurotrophin receptor by the Wilms' tumor transcription factor Wt1. *Genes Dev.* 19(21), 2631-2642
- 63 Neufeld, G., Cohen, T., Gengrinovitch, S. et al. (1999) Vascular endothelial growth factor (VEGF) and its receptors. *FASEB J.* 13, 9-22
- 64 Rousseau, S., Houle, F., Huot, J. (2000) Integrating the VEGF signals leading to actin-based motility in vascular endothelial cells. *Trends Cardiovasc. Med.* 10, 321-327
- 65 Wenger, R. (2002) Cellular adaptation to hypoxia: O<sub>2</sub>-sensing protein hydroxylases, hypoxia inducible transcription factors, and O<sub>2</sub>-regulated gene expression. *FASEB J.* 16, 1151-1162
- 66 Semenza, G.L., Wang, G.L. (1992) A nuclear factor induced by hypoxia via de novo protein synthesis binds to the human erythropoietin gene enhancer at a site required for transcriptional activation. *Mol. Cell. Biol.* 12(12), 5447-5453
- 67 Metzen, E., Ratcliffe, P.J. (2004) HIF hydroxylation and cellular oxygen sensing. *Biol. Chem.* 385(3-4), 223-230
- 68 Semenza, G. (2002) Signal transduction to hypoxia-inducible factor 1. *Biochem. Pharmacol.* 64, 993-998
- 69 Karth, J., Ferrer, F.A., Perlman, E. et al. (2000) Coexpression of hypoxia-inducible factor 1-alpha and vascular endothelial growth factor in Wilms' tumor. *J. Pediatr. Surg.* 35, 1749-1753
- 70 Brahimi-Horn, M.C., Pouyssegur, J. (2005) The hypoxia-inducible factor and tumor progression along the angiogenic pathway. *Int. Rev. Cytol.* 242, 157-213
- 71 Weisser, M., Kern, W., Rauhut, S. et al. (2005) Prognostic impact of RT-PCR-based quantification of WT1 gene expression during MRD monitoring of acute myeloid leukemia. *Leukemia.* 19(8), 1416-1423
- 72 Warnecke, C., Zaborowska, Z., Kurreck, J. et al. (2004) Differentiating the functional role of hypoxia-inducible factor (HIF)-1alpha and HIF-2alpha (EPAS-

- 1) by the use of RNA interference: erythropoietin is a HIF-2alpha target gene in Hep3B and Kelly cells. *FASEB J.* 18(12), 1462-1464
- 73 Fandrey, J. (2004) Oxygen-dependent and tissue-specific regulation of erythropoietin gene expression. *Am. J. Physiol. Regul. Integr. Comp. Physiol.* 286(6), R977-988
- 74 Iyer, N.V., Kotch, L.E., Agani, F. et al. (1998) Cellular and developmental control of O<sub>2</sub>-homeostasis by hypoxia-inducible factor 1 alpha. *Genes Dev.* 12(2), 149-162
- 75 Gessler, M., Konig, A., Bruns, G.A. (1992) The genomic organization and expression of the WT1 gene. *Genomics* 12, 807-813
- 76 Little, M.H., Dunn, R., Byrne, J.A. et al. (1992) Equivalent expression of paternally and maternally inherited WT1 alleles in normal fetal tissue and Wilms' tumours. *Oncogene* 7, 635-641