

6 Literaturverzeichnis

- [1] Pinsker, M.O., Goetz, C., Walther, E.U., et al., 2004, **Höhergradige Gliome und Gliomatosis cerebri.** MANUEL: 77-88
- [2] Vieyra, D., Senger, D.L., Toyama, T., Muzik, H., Brasher, P.M., Johnston, R.M., 2003, **Altered subcellular localization and low frequency of mutations of ING1 in human brain tumors.** Clin. Cancer Res. 9: 5952-5961
- [3] Tallen, G., Kaiser, I., Krabbe, S., et al., 2004, **No ING1 mutations in human brain tumors but reduced expression in high malignancy grades of astrocytoma.** Int. J. Cancer, 109: 476-479
- [4] Tallen, G., Riabowol, K., Wolff, J.E., 2003, **Expression of p33ING1 mRNA and chemosensitivity in brain tumor cells.** Anticancer Res. 23: 1631- 1635
- [5] Tallen, G., Truss, M., Kunitz, F., et al., 2006, **Differential regulation of ING1 splicing isoforms in glioblastoma cells by cisplatin.** Europ. J. Cancer., submitted Oct 2006
- [6] Garkavtsev, I., Kazarov, A., Gudkov, A., Riabowol, K., 1996, **Suppression of the novel growth inhibitor p33ING1 promotes neoplastic transformation.** Nat. Genet., 14: 415-420.
- [7] Sager, R., 1997, **Expression genetics in cancer: shifting the focus from DNA to RNA.** Proc. Natl. Acad. Sci. U.S.A., 94: 952-955
- [8] He, G.H.Y., Helbing, C.C., Wagner, M.J., Sensen, C.W., Riabowol, K., 2005, **Phylogenetic analysis of the ING family of PHD finger proteins.** Mol. Biol. Evol. 22: 104-116
- [9] Garkavtsev, I., Demetrick, D., Riabowol, K., 1997, **Cellular localization and chromosomal mapping of a novel candidate tumor suppressor gene.** Cytogenet. Cell. Genet., 83: 232-235

- [10] Kleihues, P., Cavenee, W.K. (Eds), IARC Press, Lyon, France 2000. **Pathology and genetics of tumours of the nervous system.** In: World Health Organization, Classification of Tumours of the Nervous System, Editorial and Consensus Conference Working Group.
- [11] Takahashi, M., Ozaki, T., Todo, S., Nakagawara, A., 2004, **Decreased expression of the candidate tumor suppressor gene ING1 is associated with poor prognosis in advanced neuroblastomas.** Oncol. Rep., 12: 811-816
- [12] Gong, W., Suzuki, K., Russell, M., Riabowol, K., 2005, **Function of the ING family of PHD proteins in cancer.** Int. J. Biochem. Cell Biol. 37: 1054-65
- [13] Feng, X., Hara, Y., Riabowol, K., 2002, **Different HATS of the ING1 gene family.** Trends Cell Biol. 12: 532-538
- [14] Sutherland, H.G., Mumford, G.K., Newton, K., et al., 2001, **Largescale identification of mammalian proteins localized to nuclear sub-compartments.** Hum. Mol. Genet. 10: 1995-2001
- [15] Coscoy, L., Ganem, D., 2003, **PHD domains and E3 ubiquitin ligases: viruses make the connection.** Trends Cell. Biol. 13: 7-12
- [16] Shi, X., Hong, T., Walter, K.L., et al., 2006, **ING2 PHD domain links histone H3 lysine 4 methylation to active gene repression.** Nature, 442: 96-99
- [17] Pena, P.V., Davrazou, F., Shi, X., et al., 2006, **Molecular mechanism of H3K4me3 recognition by plant homeodomain of ING2.** Nature, 442: 100-103
- [18] Scott, M., Bisvert, F.M., Vieyra, D., Johnston, R.N., Bazett-Jones, D.P., Riabowol, K., 2001, **UV induced nucleolar translocation in ING1 through two distinct nucleolar targeting sequences.** Nucleic Acids Res. 29: 2053-2058

- [19] Scott, M., Bonnefin, P., Vieyra, D., et al., 2001, **UV-induced binding of ING1 to PCNA regulates the induction of apoptosis.** J. Cell. Sci. 114: 3455-3462
- [20] Kuzmichew, A., Zhang, Y., Erdjument-Bromage, H., Tempst, P., Rheinberg, D. 2002, **Role of the Sin-3-histone deacetylase complex in growth regulation by the candidate tumor suppressor p33(ING1).** Mol. Cell. Biol. 22: 835-848
- [21] Vieyra, D., Loewith, R., Scott, M., et al. 2002, **Human ING1 proteins differentially regulate histone acetylation.** J. Biol. Chem. 277: 29832-29839
- [22] Loewith, R., Meijer, M., Lees-Miller, S.P., Riabowol, K., Young, D., 2000, **Three yeast proteins related to the human candidate tumor suppressor p33(ING1) are associated with histone acetyltransferase activities.** Mol. Cell. Biol. 20: 3807-3816
- [23] Garkavtsev, I., Grigorian, I.A., Ossovskaya, V.S., Chernov, M.V., Chumakov, P.M., Gudkov, A.V., 1998, **The candidate tumour suppressor p33^{ING1} cooperates with p53 in cell growth control.** Nature 391: 295-298.
- [24] Helbing, C., Veillette, C., Riabowol, K., Johnston, R., Garkavtsev, I.. 1997, **A novel candidate tumor suppressor, ING1, is involved in the regulation of apoptosis.** Cancer Res. 57: 1255-1258
- [25] Garkavtsev, I., Kozi, S.V., Chernova, O., et al., 2004, **The candidate tumor suppressor protein ING4 regulates brain tumor growth and angiogenesis.** Nature, 428: 328-332
- [26] Kataoka, H., Bonnefin, P., Vieyra, D., et al., 2003, **ING represses transcription by direct DNA binding and through effects of p53.** Cancer Res. 63: 5785-5792
- [27] Choy, J.S., Tobe, B.T., Huh, J.H., Kron, S.J., 2001, **Yng2p-dependent NuA4 histone H4 acetylation activity is required for mitotic and meiotic progression.** J. Biol. Chem. 276: 43653-43662

- [28] Nourani, A., Doyon, Y., Utley, R.T., Allard, S., Lane, W.S., Cote, J., 2001, **Role of an ING1 growth regulator in transcriptional activation and targeted histone acetylation by the NuA4 complex.** Moll. Cell. Biol. 21: 7629-7640
- [29] Howe, L., Kusch, T., Muster, N., Chaterji, R., Yates, J.R. 3rd, Workman, J.L., 2002, **Yng1p modulates the activity of Sas3p as a component of the yeast NuA3 Hhistone acetyltransferase complex.** Moll. Cell. Biol. 22: 5047-5053
- [30] Doyon, Y., Cayrou, C., Ullah, M., et al., 2006, **ING tumor suppressor proteins are critical regulators of chromatin acetylation required for genome expression and perpetuation.** Moll. Cell. 21: 51-64
- [31] Martin, D.G.E., Baetz, K., Shi, X., et al., 2006, **The Yng1p plant homeodomain finger is a methyl-histone binding module that recognizes lysine 4-methylated histone H3.** Moll. Cell. Biol. 26: 7871-7879
- [32] Li, H., Ilin, S., Wang, W., et al., 2006, **Molecular basis for site-specific read-out of histone H3K4me3 by the BPTF PHD finger of NURF.** Nature 442: 91-95
- [33] Kadigee, M.R., Ayer, D.E., 2006, **The polybasic region that follows the plant homeodomain zinc finger 1 of Pf1 is necessary and sufficient for specific phosphoinositide binding.** J. Biol. Chem., 281: 28831-28836
- [34] Wang, Y., Li, G., 2006, **ING3 promotes UV-induced apoptosis via Fas/caspase-8 pathway in melanoma cells.** J. Biol. Chem., 281: 11887-11893
- [35] Shinoura, N., Muramatsu, Y., Nishimura, M., et al., 1999, **Adenovirus-mediated transfer of p33ING1 with p53 drastically augments apoptosis in gliomas.** Cancer Res. 59: 5521-5528
- [36] Vieyra, D., Toyoma, T., Hara, Y., Boland, D., Johnston, R., Riabowol, K., 2002, **ING1 Isoforms differentially affect apoptosis in a cell age-dependent manner.** Cancer Res. 62: 4445-4452

- [37] Coles, A.H., Liang, H., Zhu, Z., et al., 2007, **Deletion of p37^{Ing1} in mice reveals a p53-independent role for Ing1 in the suppression of cell proliferation, apoptosis, and tumorigenesis.**
- [38] Gonzalez, L., Freije, J.M.P., Cal, S., Lopez-Otin, C., Serrano, M., Palmero, I., 2006, **A functional link between the tumor suppressors ARF and p33ING1.** Oncogene, 25: 5173 – 5179
- [39] Feng, X., Bonni, S., Riabowol, K., 2006, **HSP70 induction by ING1 proteins sensitizes cells to TNF- α receptor mediated apoptosis.** Mol. Cell. Biol., 26: 9244-9255
- [40] Tallen, G., Mock, C., Gangopadhyay, S.B., Kangarloo, B., Krebs, B., Wolff, J.E.A., 2000, **Overcoming cisplatin resistance: Design of novel hydrophobic platinum compounds.** Anticancer Res. 20: 445-449
- [41] CBTRUS Statistical Report, Central Brain Tumor Registry of the United States 2004: **Primary Brain Tumors in the United States, 1997-2001.**
- [42] Parkin, D.M., Whelan, S.L., Ferlay, J., Teppo, L., Thomas, D.B., 2002, **Cancer incidence in five continents.** IARC Press, Lyon
- [43] Stiller, C.A., Nectoux, J, 1994, **International incidence of childhood brain and spinal tumours.** Int. J. Epidemiol. 23: 458-464
- [44] Moss, A.R., 1985, **Occupational exposure and brain tumors.** J. Toxicol. Environ Health 16: 703-711
- [45] Navas-Acien, A., Pollan, M., Gusstavsson, P., Plato, N., 2002, **Occupation, exposure to chemicals and risk of gliomas and meningiomas in Sweden.** Am. J. Ind. Med. 42: 214-227

- [46] Blowers, L., Preston-Martin, S., Mach, W.J., 1997, **Dietary and other lifestyle factors of woman with brain gliomas in Los Angeles County (California, USA)**. Cancer Causes Control 8: 5-12
- [47] Boeing, H, Schlehofer, B:, Blettner, M., Wahrendorf, J., 1993, **Dietary carcinogens and the risk of glioma and meningeoma in Germany**. Int. J. Cancer 53: 561-565
- [48] Lee, M., Wrensch, M., Miike, R., 1997, **Dietary and tobacco risk factors for adult onset glioma in San Fransisco Bay Area (California, USA)**. Cancer Causes Control 8: 13-24
- [49] Brenner, A.V., Linet, M.S., Fine, H.A., et al., 2002, **History of allergies and autoimmune disease and risk of brain tumors in adults**. Int. J. Cancer 99: 252-259
- [50] Preston, D.L., Ron, E., Yonehara, S., et al., 2002, **Tumors of the nervous system and pituitary gland associated with atomic bomb radiation exposure**. J. Natl. Cancer Inst., 94: 1555
- [51] Yonehara, S., Brenner, AV., Kishikawa, M., et al., 2004, **Clinical and epidemiologic characteristics of first primary tumors of the central nervous system and related organs among atomic bomb survivors of Hiroshima and Nagasaki, 1958-1995**. Cancer, 101: 1644
- [52] Neglia, J.P., Meadows, A.T., Robinson, L.L., et al., 1991, **Second neoplasms after acute lymphoblastic leukemia in childhood**. N. Engl. J. Med. 325: 1330.1336
- [53] Relling, M.V., Rubnitz, J.E., Rivera, G.K., et al., 1999, **High incidence of secondary brain tumors after radiotherapy and animetabolites**. Lancet 354: 34-39
- [54] Stupp, R., Mason, W.P., van den Bent, M.J., et al., 2005, **Radiotherapy plus concomitant and adjuvant temozolomide for glioblastoma**. N. Engl. J. Med. 352: 987-996

- [55] Buckner, J.C., Ballman, K.V., Michalak, J.C., et al, 2006, **Phase III trial of carmustine and cisplatin compared with carmustine alone and standard radiation therapy or accelerated radiation therapy in patients with glioblastoma multiforme: North Central Cancer Treatment Group 93-72-52 and Southwest Oncology Group 9503 Trials.** J. Clin. Oncol., 24: 3871
- [56] Shapiro, W.R., Green, S.B., Burger, P.C., et al., 1989, **Randomized trial of three chemotherapy regimens and two radiotherapy regimens in postoperative treatment of malignant glioma.** Brain Tumor Cooperative Group Trial 8001. J. Neurosurg. 71: 1
- [57] Gnekow, A., **Gliome mit niedriger Malignität.** In: Gadner, H., Gaedicke, G., Niemeyer, C.H., Ritter, J. (Hrsg.): Pädiatrische Hämatologie und Onkologie, Springer-Verlag 2006 ISBN:3540037020
- [58] Listernick, R., Louis, D.N., Packer, R.J., Gutmann, D.H., 1997, **Optic pathway gliomas in children with neurofibromatosis 1: consensus statement from the NF 1 optic pathway glioma task force.** Ann. Neurol. 41: 143-149
- [59] Li, F.P., Fraumeni, J.F. Jr., Mullvihill, J.J. et al., 1988, **A cancer family syndrome in twenty-four kindreds.** Cancer Res. 48: 5358
- [60] Harris, H., Miller, O.J., Klein, G., Worst, P., Tachibana, T., 1969, **Suppression of malignancy by cell fusion.** Nature 223: 363-368.
- [61] Knudson, A.G. Jr., 1971, **Mutation and cancer: statistical study of retinoblastoma.** Proc. Natl. Acad. Sci. 68: 820-823
- [62] Devereux, T.R., Riesinger, J.I., Barret J.C., 1999, **Mutations and altered expression of human cancer genes: what they tell us about causes,** in: Carcinogenic Hazard Evaluation, IARC Scientific Publication No. 146, Lyon

- [63] Watanabe K., Tachibana O., Sata, K., Yonekawa, Y., Kleihues, P., Ohgaki, H., 1996, **Overexpression of the EGF receptor and p53 mutations are mutually exclusive in the evolution of primary and secondary glioblastomas.** Brain Pathol. 6: 217
- [64] Ohgaki, H., Dessen, P., Jourde, B., et al., 2004, **Genetic Pathways to Glioblastoma.** Cancer Research 64: 6892-6899
- [65] Vaux, D.L., Korsmeyer, S.J., 1999, **Cell death in development.** Cell 96: 245-254
- [66] Roversi, G., Pfundt, R., Moroni, R.F., et al., 2006, **Identification of novel genomic markers related to progression to glioblastoma through genomic profiling of 25 primary glioma cell lines.** Oncogene 25: 1571-1583
- [67] Kleihues, P., Ohgaki, H., 1999 **Primary and secondary glioblastoma: from concept to clinical diagnosis.** Neuro-Oncology 1: 44-51
- [68] Lang, F.F., Miller, D.C., Koslow, M., Newcomb EW, 1994, **Pathways leading to glioblastoma multiforme: a molecular analysis of genetic alterations in 65 astrocytic tumors.** J. Neurosurg., 81 : 427-436
- [69] Fujisawa, H., Kurre, M., Reis, R.M., Yonekawa, Y., Kleihues, P., Ohgaki, H., 1999, **Acquisition of the glioblastoma phenotype during astrocytoma progression is associated with loss of heterozygosity on 10q25-qter.** Am. J. Pathol., 155: 387-394
- [70] Rasheed, B.K., McLendon, R.E., Friedmann, H.S., et al. **Chromosome 10 deletion mapping in human gliomas: a common deletion region in 10q25.** Oncogene 1995; 10: 2243-2246
- [71] Li, J., Yen, C., Liaw, D., et al., 1997, **PTEN, a putative protein tyrosine phosphatase gene mutated in human brain, breast and prostate cancer.** Science, 275: 1943-1947
- [72] Giese, A., Westphal, M., 1996, **Glioma invasion of the central nervous system.** Neurosurgery, 39 : 235-250

- [73] Rao, J.S., 2003, **Molecular mechanisms of glioma invasiveness: the role of proteases.** Nat. Rev. Cancer 3: 489-501
- [74] Brat, D.J., Mapstone, T.B., 2003, **Malignant glioma physiology: cellular response to hypoxia and its role in tumor progression.** Ann. Intern. Med. 138: 659-668
- [75] Louis, D.N., 2006, **Molecular pathology of malignant glioma.** Ann. Rev. Pathol. Mech. Diss 1:97
- [76] Jones, P.A., Baylin, S.B., 2002, **The fundamental role of epigenetic events in cancer.** Nat. Rev. Genet. 3: 415-428
- [77] Costello J.F., Berger, M.S., Huang, H.s., Cavenee, W.K., 1996, **Silencing of p16/CDKN2 expression in human gliomas by methylation and chromatin condensation.** Cancer Res. 56: 2405-2410
- [78] Watanabe, T., Huang, H., Nakamura, M., et al., 2002, **Methylation of the p73 gene in human gliomas.** Acta Neuropathol (Berl.), 104: 357-362
- [79] Gonzales-Gomez, P., Bello, M.J., Arjona, D., et al., 2003, **Promoter hypermethylation of multiple genes in astrocytic gliomas.** Int. J. Oncol. 22: 601-608
- [80] Felsberg, J., Yan, P.S., Huang, T.H., et al., 2006, **DNA methylation and allelic losses on chromosome arm 14q in oligodendroglial tumours.** Neuropathol. Appl. Neurobiol. 32: 517-24.
- [81] Kim, T.Y., Zhong, S., Fields, C.R., Kim, J.H., Robertson, K.D., 2006, **Epigenomic profiling reveals novel and frequent targets of aberrant DNA methylation-mediated silencing in malignant glioma.** Cancer Res. 66: 7490-7501

- [82] Bender, C.M., Pao, M.M., Jones, P.A., 1998, **Inhibition of DNA methylation by 5-aza-2'-desoxycytidine suppresses the growth of human tumor cell lines.** Cancer Res. 58: 95-101
- [83] Cameron, E.E., Bachmann, K.E., Myohanen, S., Herman, J.G., Baylin, S.B., 1999, **Synergy of demethylation and histone deacetylase inhibition in the re-expression of genes silenced in cancer.** Nat. Genet. 21: 103-107
- [84] Grossmann, S.A., O'Neill, A., Grunnet, M., et al., 2003, **Phase III Study Comparing Three Cycles of Infusional Carmustine and Cisplatin Followed by Radiation Therapy With Radiation Therapy and Concurrent Carmustine in Patients With Newly Diagnosed Supratentorial Glioblastoma Multiforme: Eastern Cooperative Oncology Group Trial 2394.** J. Clin. Oncol., 24: 3871
- [85] Chiocca, E.A., Aghi, M., Fulci, G., 2003, **Viral therapy of glioblastoma.** Cancer J. 9: 167
- [86] Bart, J., Groen, H.J., Hendrikse, N.H., van der Graaf, W.T., Vaalburg, W., de Vries, E.G., 2000, **The blood-brain barrier and oncology: new insights into function and modulation.** Cancer Treat. Rev. 26: 449
- [87] Rajkumar, S.V., Bucner, J.C., Schornberg, P.J., Cascino, T.L., Burch, P.A., Dinapoli, R.P., 1998, **Phase I evaluation of radiation combined with recombinant interferon alpha-2a and BCNU for patients with high grade glioma.** Int. J. Radiat. Oncol. Biol. Phys 40: 297
- [88] Marks, P.A., Richon, V.M., Rifkind, R.A., 2000, **Histone deacetylase inhibitors: inducers of differentiation or apoptosis of transformed cells.** J. Natl. Cancer Inst., 92: 1210-1216
- [89] Liu, T., Kuljaca, S., Tee, A., Marshall, G.M., 2006, **Histone deacetylase inhibitors: Multifunctional anticancer agents.** Cancer Treatment Reviews, 32: 157-165

- [90] Warell, R.P., He, L.Z., Richon, V., Calleja, E., Pandolfi, P.P., 1998, **Therapeutic targeting of transcription in acute promyelocytic leukemia by use of an inhibitor of histone deacetylase**. J. Natl. Cancer Inst., 90: 1621-1625
- [91] Minucci, S. and Pelicci, P.G., 2006, **Histone deacetylase inhibitors and the promise of epigenetic (and more) treatments for cancer**. Nature Reviews 6: 38 – 51
- [92] Johnstone, R.W., 2002, **Histone-deacetylase inhibitors: novel drugs for the treatment of cancer**. Nature Rev. Drug Discov. 1: 287-299
- [93] Ries, L.A.G., Eisner, M.P., Kosary, C.L., et al., 2004, **SEER Cancer Statistic Review, 1975-2001, National Cancer Institute**. Bethesda, M.D., seer.cancer.gov/csr/1975_2001
- [94] Ferlay, J., Bray, F., Pisani, P., Parkin, D.M., 2000, **Globocan 2000: Cancer incidence, mortality and prevalence worldwide**. IARC Press, Lyon
- [95] Parkin, D.M., Whelan, S.L., Ferlay, J., Teppo, L., Thomas, D.B., 2002, **Cancer incidence in five continents**. IARC Press, Lyon
- [96] Kim, M.S., Baek, J.H., Chakravarty, D., Sidransky, D., Carrier, F., 2005, **Sensitization to UV-induced apoptosis by the histone deacetylase inhibitor trichostatin A (TSA)**. Exp. Cell. Res. 306: 94-102
- [97] Fine, H.A., Dear, K.B., Loeffler, J.S., Black, P.M., Canellos, G.P., 1993, **Meta-analysis of radiation therapy with and without chemotherapy for malignant gliomas in adults**. Cancer 71: 2585
- [98] Kreth, F., Warnke, P.C., Scheremet, R., Ostertag, C.B., 1993, **Surgical resection and radiation therapy versus biopsy and radiation therapy in the treatment of glioblastoma multiforme**. J. Neurosurg. 78: 762
- [99] Quigley, M.R., Maroon, J.C., 1991, **The relationship between survival and the extent of the resection in patients with supratentorial malignant gliomas**. Neurosurgery 29: 385

- [100] Devaux, B.C., O'Fallon, J.R., Kelly, P.J., 1993, **Resection, biopsy, and survival in malignant glial neoplasms. A retrospective study of clinical parameters, therapy, and outcome.** J. Neurosurg. 78: 767
- [101] Laws, E.R., Parney, I.F., Huang, W., et al., 2003, **Survival following surgery and prognostic factors for recently diagnosed malignant glioma: data from the Glioma Outcomes Project.** J. Neurosurg. 99: 467
- [102] LaCroix, M., Abi-Said, D., Journey, D.R., et al., 2001, **A multivariate analysis of 416 patients with glioblastoma multiforme: prognosis, extent of resection, and survival.** J. Neurosurg. 95: 190
- [103] Wetzel, M., Premkumar, D.R., Arnold, B., Pollak, I.F., 2005, **Effect of trichostatin A, a histone deacetylase inhibitor, on glioma proliferation in vitro by inducing cell cycle arrest and apoptosis.** J. Neurosurg. 103: 549-556
- [104] Inokoshi, J., Katagiri, M., Arima, S., et al., 1999, **Neuronal differentiation of neuro 2a cells by inhibitor of cell cycle progression, trichostatin A and butyrolactone I.** Biochem. Biophys. Res. Commun., 256: 372-376
- [105] Kim, M.S., Kwan, H.J., Lee, Y.M., et al., 2001, **Histone deacetylases induce angiogenesis by negative regulation of tumor suppressor genes.** Nat. Med., 7: 437-443
- [106] Munro, J., Barr, N.I., Ireland, H., Morrison, V., Parkinson, E.K., 2004, **Histone deacetylase inhibitors induce a senescence-like state in human cells by a p16-dependent mechanism that is independent of a mitotic clock.** Exp. Cell. Res. 295: 225-238
- [107] Zhou, C., Qiu, L., Sun, Y., et al., 2006, **Inhibition of EGFR/PI3K/AKT cell survival pathway promotes TSA's effects on cell death and migration in human ovarian cancer cells.** Int. J. Oncol., 29: 269-278

- [108] Sowa, Y., Orita, T., Hiranabe-Minamikawa, S., et al., 1999, **Histone deacetylase inhibitor activates the p21/WAF/Cip1 gene promoter through the Sp1 sites.** Ann. N. Y. Acad. Sci. 886: 195-199
- [109] Richon, V.M., Sandoff, T.W., Rifkind, R.A., Marks, P.A., 2000, **Histone deacetylase inhibitors selectively induce p21 WAF1 expression and gene-associated histone acetylation.** Proc. Natl. Acad. Sci. USA, 97: 100114-10019
- [110] Nakata, S., Yoshida ,T., Horinaka, M., Shiraishi, T., Wakada, M., Sakai, T., 2004, **Histone deacetylase inhibitors upregulate death receptor 5/TRAIL-R2 and sensitize apoptosis induced by TRAIL/APO2-L in human malignant tumor cells.** Oncogene 23: 6261-6271
- [111] Sonnemann, J., Gaenge, J., Kumar, K.S., Muellerm C., Baderm P., Beckm J.F., 2005, **Histone deacetylase inhibitors interact synergistically with tumor necrosis factor-related apoptosis-inducing ligand (TRAIL) to induce apoptosis in carcinoma cell lines.** Invest. New Drugs 23: 99-109
- [112] Mühlenthaler-Mottet, A., Flahaut, M., Bourloud, K., et al., 2006, **Histone deacetylase inhibitors strongly sensitise neuroblastoma cells to TRAIL-induced apoptosis by a caspases-dependent increase of the pro- to antiapoptotic proteins ratio.** BMC Cancer, 6: 214
- [113] Ishii, N., Maier, D., Merlo, A., et al., 1999, **Frequent co-alterations of TP53, p16/CDKN2A, p14ARF, PTEN tumor suppressor genes in human glioma cell line.** Brain Pathol. 9:469-479
- [114] Schlapbach, R., Fontana, A., 1997, **Differential activity of bcl-2 and ICE enzyme family protease inhibitors on Fas and puromycin-induced of glioma cells.** Biochim. Biophys. Acta 1359:174-180

- [115] Suzuki, T., Yokazaki, H., Kuniyasu, H., et al., 2000, **Effect of Trichostatin A on cell growth and expression of cell cycle- and apoptosis-related molecules in human gastric and oral carcinoma cell lines.** Int. J. Cancer 88:992-997
- [116] Wang, Z.M., Hu, J., Zhou, D., Xu, Z.Y., Panasaci, L.C., Chen, Z.P., 2002, **TSA inhibits proliferation and induces expression of p21WAF and p27 in human brain tumor cell lines.** Ai Zheng 21: 1100-1105
- [117] Yamashita, Y., Shimada, M, Harimoto, N., et al., 2002, **Histone deacetylase inhibitor Trichostatin A induces cell-cycle arrest/apoptosis and hepatocyte differentiation in human hepatoma cells.** Int. J. Cancer 103: 572-576
- [118] Fire, A., Xu, S., Montgomery, M.K., Kostas, S.A., Driver, S.E., Mello, C.C., 1998, **Potent and specific genetic interference by double-stranded RNA in *Caenorhabditis elegans*.** Nature, 391: 806-811
- [119] Mizuno, T., Chou, M.Y., Inouye, M., 1984, **A unique mechanism regulating gene expression: translational inhibition by complementary RNA transcript (micRNA).** Proc. Natl. Acad. Sci USA 81: 1966-1970
- [120] Boland, D., Olineck, V., Bonnefin, P., Vieyra, D., Parr, E., Riabowol, K., 2000, **A panel of CAb antibodies recognize endogenous and ectopically expressed ING1 protein.** Hybridoma 19:161-165
- [121] Latt, S.A., 1973, **Microfluorometric detection of deoxyribonucleic acid replication in human metaphase chromosomes.** Proc. Natl. Acad. Sci. USA 70 : 3395-3399.
- [122] Van Lint, C., Emiliani, S., Verdin, E., 1996, **The expression of a small fraction of cellular genes is changed in response to histone hyperacetylation.** Gene Expr. 5: 245-253
- [123] Eggert, A., Grotzer, M.A., Zuzak, T.J., et al., 2001, **Resistance to tumor necrosis factor-related apoptosis-inducing ligand (TRAIL)-induced apoptosis in**

neuroblastoma cells correlates with a loss of caspase-8 expression. Cancr Res., 61: 1314-1319

- [124] Lin, T., Gu, J., Zhang, L., et al., 2002, **Target expression of green fluorescent protein/tumor necrosis factor-related apoptosis-inducig ligand fusion protein from human telomerase reverse transcriptase promoter elicits antitumor activity without toxic effects on primary human hepatocytes.** Cancer Res., 62: 3620-3625
- [125] Nicholson, D.W., Thornberry, N.A., 1997, **Caspases: killer proteases.** Trends Biochem. Sci. 22: 299-306
- [126] Cohen, G.M., 1997, **Caspases: the executioners of apoptosis.** Biochem. J. 326: 1-16
- [127] Richon, V.M., Emiliani, S., Verdin, E., et al., 1998, **A class of hybrid polar inducers of transformed cell differentiation inhibits histone deacetylases.** Proc. Natl. Acad. Sci. 95: 3003-3007
- [128] Butler, L.M., Agus, D.B., Scher, H.I., et al., 2000, **Suberoylanilide hydroxamic acid, an inhibitor of histone deacetylase, suppresses the growth of prostate cancer cells *in vitro* and *in vivo*.** Cancer Res. 60: 5165-5170
- [129] Butler, L.M., Webb, Y., Agus, D.B., et al., 2001, **Inhibition of transformed cell growth and induction of cellular differentiation by pyroxamide, an inhibitor of histone deacetylase.** Cli. Cancer Res. 7: 962-970
- [130] Marks, P., Rifkind, R.A., Richon, V.M., Breslow, R., Miller, T., Kelly, W.K., 2001, **Histone deacetylases and cancer: causes and therapies.** Nature Rev. Cancer 1: 194-202
- [131] Matheu, A., Klatt, P., Serrano, M., 2005, **Regulation of the INK4a/ARF locus by histone deacetylase inhibitors.** J. Biol. Chem. 280: 42433-41

- [132] Place, R.F., Noonan, E.J., Giardina, C., 2005, **HDAC inhibition prevents NF-kappa B activation by suppressing proteasome activity: down-regulation of proteasome subunit expression stabilizes I kappa B alpha.** Biochem. Pharmacol. 70: 394-406
- [133] Gaetano, C., Catalano, A., Palumbo, R., et al., 2000, **Transcriptionally active drugs improve adenovirus vector performance in vitro and in vivo.** Gene Therapy, 7: 1624-1630
- [134] Yamano, T., Ura, K., Morishita, R., Nakajima, H., Monden, M., Kaneda, Y., 2000, **Amplification of transgene expression in vitro and in vivo using a novel inhibitor of histone deacetylase.** Molecular Therapy, 1: 574-580
- [135] Handumrongkul, C., Zhong, W., Debs, R.J., 2002, **Distinct sets of cellular genes control the expression of transfected, nuclear-localized genes.** Molecular Therapy, 5: 186-194
- [136] Choi, K.H., Basma, H., Singh, J., Cheng, P.-W., 2005, **Activation of CMV promoter-controlled glycosyltransferase and β-galactosidase glycogens by butyrate, trichostatin A, and 5-Aza-2'-deoxycytidine.** Glycoconjugate Journal 22: 63
- [137] Grassi, G., Maccaroni, P., Meyer, et al., 2003, **Inhibitors of DNA methylation and histone deacetylation activate cytomegalovirus promoter-controlled reporter gene expression in human glioblastoma cell line U87.** Carcinogenesis, 10: 1625-35
- [138] Zhang, L., Fang, B., 2005, **Mechanisms of resistance to TRAIL-induced apoptosis in cancer.** Cancer Gene Ther. 12: 228-237