



152. Wang, Z., Zhang, Y., Banerjee, S., Li, Y., & Sarkar, F. H. Notch-1 down-regulation by curcumin is associated with the inhibition of cell growth and the induction of apoptosis in pancreatic cancer cells. *Cancer* 106, 2503-2513 (2006).
153. Skommer, J., Wlodkowic, D., & Pelkonen, J. Cellular foundation of curcumin-induced apoptosis in follicular lymphoma cell lines. *Exp Hematol* 34, 463-474 (2006).
154. Dhye, C. S. & Pylaj, M. R. Antitumor action of curcumin in human papillomavirus associated cells involves downregulation of viral oncogenes, prevention of NFkB and AP-1 translocation, and modulation of apoptosis. *Mol Carcinog* 45, 320-332 (2006).
155. Tong, Q. S., Zheng, L. D., Lu, P., Jiang, F. C., et al. Apoptosis-inducing effects of curcumin derivatives in human bladder cancer cells. *Anticancer Drugs* 17, 279-287 (2006).
156. Liu, A. S., Zinger, H., Kazanov, D., Yona, D., et al. Curcumin synergistically potentiates the growth inhibitory and pro-apoptotic effects of celecoxib in pancreatic adenocarcinoma cells. *Biomed Pharmacother* 59 Suppl 2, S276-S280 (2005).
157. Hussain, A. R., Al-Rasheed, M., Manogaran, P. S., Al-Husseini, K. A., et al. Curcumin induces apoptosis via inhibition of PI3'-kinase/AKT pathway in acute T cell leukemias. *Apoptosis* 11, 245-254 (2006).
158. Moussavi, M., Assi, K., Gómez-Muñoz, A., & Salt, B. Curcumin mediates ceramide generation via the de novo pathway in colon cancer cells. *Carcinogenesis* 27, 1636-1644 (2006).
159. Shi, M., Cai, Q., Yao, L., Mao, Y., et al. Antiproliferation and apoptosis induced by curcumin in human ovarian cancer cells. *Cell Biol Int* 30, 221-226 (2006).
160. Atsumi, T., Murakami, Y., Shibuya, K., Tonosaki, K., & Fujiwara, S. Induction of cytotoxicity and apoptosis and inhibition of cyclooxygenase-2 gene expression, by curcumin and its analog, alpha-disubstituted. *Anticancer Res* 25, 4029-4036 (2005).
161. Nagai, S., Kurimoto, M., Washiyama, K., Hirashima, Y., et al. Inhibition of cellular proliferation and induction of apoptosis by curcumin in human malignant astrocytoma cell lines. *J Neurooncol* 74, 105-111 (2005).
162. Kim, K., Ryu, K., Ko, Y., & Park, C. Effects of nuclear factor-kappaB inhibitors and its implication on natural killer T-cell lymphoma cells. *Br J Haematol* 131, 59-66 (2005).
163. Uddin, S., Hussain, A. R., Manogaran, P. S., Al-Husseini, K., et al. Curcumin suppresses growth and induces apoptosis in primary effusion lymphoma. *Oncogene* 24, 7022-7030 (2005).
164. Shishodia, S., Amin, H. M., Liu, R., & Aggarwal, B. B. Curcumin (diferuloylmethane) inhibits constitutive NF-kappaB activation, induces G1/S arrest, suppresses proliferation, and induces apoptosis in mantle cell lymphoma. *Biochem Pharmacol* 70, 700-713 (2005).
165. Tsvetkov, P., Asher, G., Reiss, V., Shaul, Y., et al. Inhibition of NAD(P)H:quinone oxidoreductase 1 activity and induction of p53 degradation by the natural phenolic compound curcumin. *Proc Natl Acad Sci U S A* 102, 5535-5540 (2005).
166. Li, L., Aggarwal, B. B., Shishodia, S., Abruzzese, J., & Kuroiwa, R. Nuclear factor-kappaB and IkappaB kinase are constitutively active in human pancreatic cells, and their down-regulation by curcumin (diferuloylmethane) is associated with the suppression of proliferation and the induction of apoptosis. *Cancer* 101, 2351-2362 (2004).
167. Collett, G. B. & Campbell, F. C. Curcumin induces c-jun N-terminal kinase-dependent apoptosis in HCT116 human colon cancer cells. *Carcinogenesis* 25, 2183-2189 (2004).
168. Odlet, J., Albert, P., Carlier, A., Tarpin, M., et al. In vitro and in vivo anti-tumoral effect of curcumin against melanoma cells. *Int J Cancer* 111, 381-387 (2004).
169. Zheng, M., Ermekcioglu, S., Walch, E. T., Tang, C. H., & Grimm, E. A. Inhibition of nuclear factor-kappaB and nitric oxide by curcumin induces G2/M cell cycle arrest and apoptosis in human melanoma cells. *Melanoma Res* 14, 165-171 (2004).
170. Nakano, K., Nakayoshi, T., Yasumoto, S., Morshed, S. R., et al. Induction of apoptosis by beta-diketones in human tumor cells. *Anticancer Res* 24, 711-717 (2004).
171. Radhakrishna Pillai, G., Sivastava, A. S., Hassanain, T. I., Chauhan, D. P., & Carrier, E. Induction of apoptosis in human lung cancer cells by curcumin. *Cancer Lett* 208, 163-170 (2004).
172. Singh, S. & Bhat, M. K. Carboplatin induces apoptotic cell death through downregulation of constitutively active nuclear factor-kappaB in human HPV-18 E6-positive Hep-2 cells. *Biochem Biophys Res Commun* 318, 346-353 (2004).
173. Bhatti, A. C., Shishodia, S., Reuben, J. M., Weber, D., et al. Nuclear factor-kappaB and STAT3 are constitutively active in CD138+ cells derived from multiple myeloma patients, and suppression of these transcription factors leads to apoptosis. *Blood* 103, 3175-3184 (2004).
174. Martín-Cordero, C., López-Lázaro, M., Gilvez, M., & Ayaso, M. J. Curcumin as a DNA topoisomerase II poison. *Eur J Med Chem* 18, 505-509 (2003).
175. Bhatti, A. C., Donato, N., Singh, S., & Aggarwal, B. B. Curcumin (diferuloylmethane) down-regulates the constitutive activation of nuclear factor-kappa B and KappaBalpha kinase in human multiple myeloma cells, leading to suppression of proliferation and induction of apoptosis. *Blood* 101, 1053-1062 (2003).
176. Mukhopadhyay, A., Bueso-Ramos, C., Chatterjee, D., Pantazi, P., & Aggarwal, B. B. Curcumin downregulates cell survival mechanisms in human prostate cancer cell lines. *Oncogene* 20, 7597-7609 (2001).
177. Buth, J. A., Cheng, K. J., & Li, G. Curcumin induces apoptosis in human melanoma cells through a Fas receptor/caspase-8 pathway independent of p53. *Exp Cell Res* 271, 305-314 (2001).
178. Pan, M. H., Chang, W. L., Lin-Shiau, S. Y., Ho, C. T., & Lin, J. K. Induction of apoptosis by genistein and curcumin through cytochrome c release and activation of caspases in human leukemia HL-60 cells. *J Agric Food Chem* 49, 1464-1474 (2001).
179. Han, S. S., Chung, S. T., Robertson, D. A., Ranjan, D., & Bondada, S. Curcumin causes the growth arrest and apoptosis of B cell lymphoma by downregulation of c-myc, bcl-XL, NF-kappa B, and p53. *Clin Immunol* 93, 152-161 (1999).
180. Ramachandran, C., & You, W. Differential sensitivity of human mammary epithelial and breast carcinoma cell lines to curcumin. *Breast Cancer Res Treat* 54, 269-278 (1999).
181. Gautam, S. C., Xu, Y. X., Poddala, B. R., Jankiraman, N., Chapman, A. B. Nonselective inhibition of proliferation of transformed and nontransformed cells by the anticancer agent curcumin (diferuloylmethane). *Biochem Pharmacol* 55, 1333-1337 (1998).
182. Hanif, R., Qiao, L., Shiff, J. J., & Rigas, B. Curcumin, a natural plant phenolic food additive, inhibits cell proliferation and induces cell cycle changes in colon adenocarcinoma cell lines by a prostaglandin-independent pathway. *J Lab Clin Med* 130, 576-584 (1997).