

DAFTAR PUSTAKA

Abbas T, Dutta A, 2009. p21 in cancer: intricate networks and multiple activities. *Nat Rev Cancer* 9(6):400–414.

Abdulkareem IH, 2013. A review on aetio–pathogenesis of breast cancer. *J Genet Syndr Gene Ther* 4(5):1–4.

Abukhdeir AM, Park BH. p21 and p27: roles in carcinogenesis and drug resistance. *Expert Rev Mol Med* 10:1–18.

Agnantis NJ, Fatouros M, Arampatzis I, Briasoulis E, Ignatiadou EV, Paraskevaidis E, Roukos D, 2004. Carcinogenesis of breast cancer: advances and applications. *Gastric Breast Cancer* 2004 3(1):13–22.

Aka JA, Lin SX, 2012. Comparison of functional proteomic analyses of human breast cancer cell lines T47D and MCF7. *PLoS One* 7(2):1–9.

Alali FQ, Liu XX, McLaughlin JL, 1999. Annonaceus acetogenins: recent progress. *J Nat Prod* 62:504–540.

Aliouat–Denis CM, Dendouga N, van den Wyngaert I, Goehlmann H, Steller U, van de Weyer I, van Slycken N, Andries L, Kass S, Luyten W, Janicot M, Vialard JE, 2005. p53–independent regulation of p21Waf1/Cip1 expression and senescence by Chk2. *Mol Cancer Res* 3(11):627–34.

American Cancer Society. Cancer Facts and Figures 2014. Atlanta: American Cancer Society; 2014. Tersedia dari: <http://www.cancer.org>. [Diakses pada tanggal 28 Maret 2014].

Arnold A, Papanikolaou A, 2006. Cyclin D1 in breast cancer pathogenesis. *J Clin Oncol* 23:4215–4224.

Astirin OP, Prayitno A, Artanti AN, Fitria MS, Witianingsih DA, Pranatami DA, *et al*, 2014. The expression of p53 and hsp70 proteins after treatment with *Annona muricata* Linn leaf for activating apoptotic and lead to homeostasis program of Raji cells. *International journal of cancer therapy and oncology* 2(2):1–6.

Bagci EZ, Vodovotz Y, Billiar TR, Ermentrout GB, Bahar I, 2006. Bistability in apoptosis: Roles of Bax, Bcl–2, and mitochondrial permeability transition pores. *Biophys J* 90(5): 1546–1559.

Bandala C, Perez–Santos JL, Lara–Padilla E, Delgado Lopez G, Anaya–Ruiz M., 2013. Effect of botulinum toxin A on proliferation and apoptosis in the T47D breast cancer cell line. *Asian Pac J Cancer Prev* 14(2):891–894.

Barnes DM, Gillet CE, 1998. Cyclin D1 in breast cancer. *Breast cancer research and treatment* 52:1–15.

Bartek J, Lukas J, 2007. DNA damage checkpoints: from initiation to recovery or adaptation. *Current Opinion in Cell Biology* 19:238–245.

Barzegar E, Fouladdel S, Movahhed TK, Atashpour S, Ghahremani MH, Ostad SN, *et al*, 2015. Effects of berberine on proliferation, cell cycle distribution and apoptosis of human breast cancer T47D and MCF7 cell lines. *Iran J Basic Med Sci* 18(4):334–342.

Bertho AL, Santiago MA, Coutinho SG, 2000. Flow Cytometry in the Study of Cell Death. *Mem Inst Oswaldo Cruz* 95(3):429–433.

Billen LP, Shamas-Din A, Andrews DW, 2009. Bid: a Bax-like BH3 protein *Oncogene* 27:S93–S104.

Birgersdotter A, Sandberg R, Ernberg I, 2005. Gene expression perturbation in vitro—a growing case for three-dimensional (3D) culture systems. *Semin Cancer Biol* 15(5):405–412.

Bleicken S, Classen M, Padmavathi PVL, Ishikawa T, Zeth K, Steinhoff H-J, *et al*, 2010. Molecular Details of Bax Activation, Oligomerization, and Membrane Insertion. *The Journal Of Biological Chemistry* 285(9):6636–6647.

Brooks CL, Gu W, 2003. Ubiquitination, phosphorylation and acetylation: the molecular basis for p53 regulation. *Curr Opin Cell Biol* 15(2):164–171.

Brown M, Wittwer C, 2000. Flow cytometry: principles and clinical applications in hematology. *Clinical chemistry* 46(8):1221–29.

Byun JY, Kim MJ, Eum DY, Seo WD, Park KH, Hyun JW, *et al*, 2009. Reactive oxygen species-dependent activation of Bax and Poly(ADP-ribose) Polymerase-1 is required for mitochondrial cell death induced by triterpenoid pristimerin in human cervical cancer cells. *Molecular Pharmacology* 76(4):734–744.

Cairns RA, Harris IS, Mak TW, 2011. Regulation of cancer cell metabolism. *Nature Review Cancer* 11:85–95.

Cecconi F, Alvarez-Bolado G, Meyer BI, Roth KA, Gruss P, 1998. Apaf1 (CED-4 homolog) regulates programmed cell death in mammalian development. *Cell* 94(6):727–737.

Cerella C, Radogna F, Dicato M, Diederich M, 2013. Natural compounds as regulators of the cancer cell metabolism. *International Journal of Cell Biology* 2013:1–16.

Chahboune N, Barrachina I, Royo I, Romero V, Saez J, Tormo JR, *et al*, 2006. Guanaconetins, new antitumoral acetogenins, mitochondrial complex I and tumor cell growth inhibitors. *Bioorganic & Medicinal Chemistry* 14:1089–1094.

Chaitanya GV, Alexander JS, Babu PP, 2010. PARP–1 cleavage fragments: signatures of cell–death proteases in neurodegeneration. *Cell Communication and Signaling* 8(3):1–11.

Champy P, Hoeglinger GU, Feger J, Gleye C, Hocquemiller R, Laurens A, *et al*, 2004. Annonacin, a lipophilic inhibitor of mitochondrial complex I, induces nigral and striatal neurodegeneration in rats: possible relevance for atypical parkinsonism in Guadeloupe. *Journal of Neurochemistry* 88:63–69.

Chan HM, Krstic–Demonacos M, Smith L, Demonacos C, La Thangue NB, 2001. Acetylation control of the retinoblastoma tumour–suppressor protein. *Nat Cell Biol* 3(7):667–674.

Chang LK, Putcha GV, Deshmukh M, Johnson Jr EM, 2002. Mitochondrial involvement in the point of no return in neuronal apoptosis. *Biochimie* 84(2002) 223–231.

Chen Y, Chen JW, Zhai JH, Wang Y, Wang SL, Li X, 2013. Antitumor activity and toxicity relationship of annonaceous acetogenins. *Food Chem Toxicol* 58:394–400.

Chipuk JE, Fisher JC, Dillon CP, Kriwacki RW, Kuwana T, Green DR, 2008. Mechanism of apoptosis induction by inhibition of the anti–apoptotic BCL–2 proteins. *PNAS* 105(51):20327–20332.

Christopher L. Brooks CL, Gu W, 2006. p53 Ubiquitination: Mdm2 and Beyond. *Mol Cell*. 21(3):307–315.

Coothankandaswamy V, Liu Y, Mao SC, Morgan JB, Mahdi F, Jekabsons MB, *et al*, 2010. The alternative medicine pawpaw and its acetogenin constituents suppress tumor angiogenesis via the HIF–1/VEGF pathway. *J Nat Prod* 73(5):956–961.

Cocca BA, Cline AM, Radic MZ, 2002. Blebs and apoptotic bodies are B cell autoantigens. *The Journal of Immunology* 169:159–166.

Crowe DL, Yoon E, 2003. A common pathway for chemotherapy–induced apoptosis in human squamous cell carcinoma lines distinct from that of receptor–mediated cell death. *Anticancer Res* 23(3B):2321–2328.

de Bruin EC, Medema JP, 2008. Apoptosis and non-apoptotic deaths in cancer development and treatment response. *Cancer Treatment Reviews* 34:737–749.

de Pedro N, Cautain B, Melguizo A, Vicente F, Genilloud O, Peláez F, Tormo JR, 2013. Mitochondrial complex I inhibitors, acetogenins, induce HepG2 cell death through the induction of the complete apoptotic mitochondrial pathway. *J Bioenerg Biomembr* (1–2):153–64.

Denicourt C, Dowdy SF, 2004. Cip/Kip proteins: more than just CDKs inhibitors. *Genes & Development* 18:851–855.

Ditsworth D, Zong W–X, Thompson CB, 2007. Activation of Poly(ADP)–Ribose Polymerase (Parp–1) induces release of the pro-inflammatory mediator Hmgb1 from the nucleus. *The Journal Of Biological Chemistry* 282(24):17845–17854.

Doonan F, Donovan M, Thomas G, Cotter TG, 2003. Caspase independent photoreceptor apoptosis in mouse models of retinal degeneration. *The Journal of Neuroscience* 23(13):5723–5731.

Ekholm SV, Zickert PZ, Reed SI, Zetterberg A, 2001. Accumulation of cyclin E is not a prerequisite for passage through the restriction point. *Mol Cell Biol* 21(9):3256–3265.

Ellis IO, Schnitt SJ, Garau XS, Bussolati G, Tavassoli FA, Eusebi V, *et al*, 2003. Invasive Breast Carcinoma. In (Fattaneh A, Tavassoli, Deville P). WHO clasification of tumours of the breast and Female genital Organ. 3th ed, Lyon: IARC press, pp 14–17.

Elmore S, 2007. Apoptosis: a review of programmed cell death. *Toxicologic Pathology* 35:495–516.

Escobar–Khondiker M, Ho¨llerhage M, Muriel MP, Champy P, Bach A, Depienne C, *et al*, 2007. Annonacin, a natural mitochondrial complex I inhibitor, causes tau pathology in cultured neurons. *The Journal of Neuroscience* 27(29):7827–7837.

Faisel CTW, Heriady Y, Fitriangga A, 2012. Gambaran efek samping kemoterapi berbasis antrasiklin pada pasien kanker payudara di RSUD Dokter Soedarso Pontianak. Tersedia dari: <http://jurnal.untan.ac.id>. [Diakses Pada Tanggal 5 Desember 2013].

Ferlay J, Shin HR, Bray F, Forman D, Mathers C, Parkin DM, 2010. Estimates of worldwide burden of cancer in 2008: GLOBOCAN 2008. *Int J Cancer* 127:2893–2917.

Festjens N, Berghe TV, Cornelis S, Vandenabeele P, 2007. RIP1, a kinase on the crossroads of a cell's decision to live or die. *Cell Death and Differentiation* 14:400–410.

Fidianingsih I, Handayani ES, 2014. *Annona muricata* aqueous extract suppresses T47D breast cancer cell proliferation. *Universa medicina*. 33(1): 19–26.

Formagio ASN, Kassuya CAL, Neto FF, Volobuff CRF, Iriguchi EKK, Vieira MC, Foglio MA, 2013. The flavonoid content and anti-proliferative, hypoglycaemic, anti-inflammatory and free radical scavenging activities of *Annona dioica* St. Hill. *BMC Complementary and Alternative Medicine* 13(14):1–8.

Foster DA, Yellen P, Xu L, Saqcena M, 2011. Regulation of G1 Cell Cycle Progression. *Genes & Cancer* 1(11): 1124–1131.

Frank AK, Pietsch C, Dumont P, Tao J, Murphy ME, 2011. Wild-type and mutant p53 proteins interact with mitochondrial caspase-3. *Cancer Biology & Therapy* 11(8):740–745.

Fraga D, Meulia T, Fenster S, 2008. *Current protocols essential laboratory techniques*. John Willey and Sons: USA.

Frenzel A, Grespi F, Chmielewski W, Villunger A, 2009. Bcl2 family proteins in carcinogenesis and the treatment of cancer. *Apoptosis* 14(2009):584–596.

Fridman JS, Lowe SW, 2003. Control of apoptosis by p53. *Oncogene* 22: 9030–9040.

Garside H, Marcoe KF, Chesnut-Speelman J, Foster AJ, Muthas D, Gerry Kenna IG, *et al*, 2014. Evaluation of the use of imaging parameters for the detection of compound-induced hepatotoxicity in 384-well cultures of HepG2 cells and cryopreserved primary human hepatocytes. *Toxicology in Vitro* 28:171–181.

Gasco M, Yulug IG, Crook T, 2003. TP53 Mutations in Familial Breast Cancer: Functional Aspects. *Human Mutation* 21:301–306.

Green DR, Chipuk JE, 2008. Apoptosis: Stabbed in the Bax. *Nature* 455:1047–49.

Gogvadze V, Orrenius S, Zhivotovsky B, 2006. Multiple pathways of cytochrome c release from mitochondria in apoptosis. *Biochimica et Biophysica Acta* 2006: 639–647.

Gonzalez CA, Guadano A, de Ines C, Martinez-Diaz R, Cortes D, 2002. Selective action of acetogenin mitochondrial complex I inhibitors. *Z Naturforsch* 57:1028–1034.

Gu B, Zhu W-G, 2012. Surf the Post-translational Modification Network of p53 Regulation. *Int. J. Biol. Sci* 8(5):672-684.

Guan Y, Guo J, Li H, Yang Z, 2013. Signaling in Pollen Tube Growth: Crosstalk, Feedback, and Missing Links. *Mol Plant*. 6(4): 1053-1064.

Guerriero JL, Ditsworth D, Catanzaro JM, Sabino G, Furie MB, *et al*, 2011. DNA Alkylating Therapy Induces Tumor Regression through an HMGB1-Mediated Activation of Innate Immunity. *J Immunol* 186:3517-3526.

Guo M, Hay BA, 1999. Cell proliferation and apoptosis. *Current Opinion in Cell Biology* 11:745-752.

Guo S, Liu M, Gonzalez-Perez RR, 2011. Role of notch and its oncogenic signaling crosstalk in breast cancer. *Biochim Biophys Acta* 1815(2): 197-213.

Han B, Wang T-D, Shen S-M, Yu Y, Mao C, Yao Z-J, *et al*, 2015. Annonaceous acetogenin mimic AA005 induces cancer cell death via apoptosis inducing factor through a caspase-3-independent mechanism. *BMC Cancer* 15(139):1-11.

Happo L, Strasser A, Cory S, 2012. BH3-only proteins in apoptosis at a glance. *J Cell Sci* 125: 1081-1087.

Haupt Y, Maya R, Kazaz A, Oren M, 1997. Mdm2 promotes the rapid degradation of p53. *Nature* 387(6630):296-299.

He HB, Wu XL, Yu B, Liu KL, Zhou GX, Qian GQ, *et al*, 2011. The effect of desacetylurvaricin on the expression of TLR4 and p53 protein in Hepg 2.2.15. *Hepat Mon* 11(5):364-367.

Henegariu O, Heerema NA, Dlouhy SR, Vance GH, Vogt PH, 1997. Multiplex PCR: clinical parameter and step by step protocol. *Biotechnology* 23(3):504-511.

Hermeking H, Lengauer C, Polyak K, He TC, Zhang L, Thiagalingam S, *et al*, 1997. 14-3-3 sigma is a p53-regulated inhibitor of G2/M progression. *Mol Cell* 1:3-11.

Hervouet E, Cheray M, Vallette FM, Cartron P-F, 2013. DNA methylation and apoptosis resistance in cancer cells. *Cells* 2:545-573.

Herzenberg LA, Tung J, Moore WA, Herzenberg LA, Parks DR, 2006. Interpreting flow cytometry data: a guide for the perplexed. *Nature Immunology* 7(7):681-685.

Hingorani R, Deng J, Elia J, Mc Intyre C, Mittar D, 2011. Detection of apoptosis using the BD Annexin V FITC assay on the BD FACS Verse™ [Internet]. BD

Bioscience [Diakses tanggal 12 Maret 2015]. Tersedia dari: <https://www.bdbiosciences.com>.

Hortobagyi GN, 2012. Toward individualized breast cancer therapy: translating biological concepts to the bedside. *The Oncologist* 17:577–584.

Holliday DL, Speirs V, 2011. Review: choosing the right cell line for breast cancer research. *Breast Cancer Research* 13(215):1–7.

Huang CY, Kuo WT, Huang YC, Lee TC, Yu LCH, 2013. Resistance to hypoxia-induced necroptosis is conferred by glycolytic pyruvate scavenging of mitochondrial superoxide in colorectal cancer cells. *Cell Death and Disease* 4:1–11.

Huang G–R, Jiang S, Wu Y–L, Jin Y, Yao Z–J, Wu J–R, 2003. Induction of cell death of gastric cancer cells by a modified compound of the annonaceous acetogenin family 4(11):1216–1221.

Hulspas R, O’Gorman MRG, Wood BL, Gratama JW, Sutherland DR, 2009. Considerations for the Control of Background Fluorescence in Clinical Flow Cytometry. *Clinical Cytometri* 76B:355–364.

Hwang BJ, Ford JM, Hanawalt PC, Chu G, 1999. Expression of the p48 xeroderma pigmentosum gene is p53-dependent and is involved in global genomic repair. *Proc Natl Acad Sci* 96(2):424–428.

Hwang HC, Clurman BE, 2005. Cyclin E in normal and neoplastic cell cycles. *Oncogene* 24:2776–2786.

Ishizuya–Oka A, Hasebe T, Shi YB, 2010. Apoptosis in amphibian organs during metamorphosis. *Apoptosis* 15(3):350–364.

Israelsen WJ, Heiden MG, 2010. ATP consumption promotes cancer metabolism. *Cell* 143:669–671.

Itoh Y, Masuyama N, Nakayama K, Nakayama KI, Gotoh Y, 2007. The cyclin-dependent kinase inhibitors p57 and p27 regulate neuronal migration in the developing mouse neocortex. *The Journal Of Biological Chemistry* 282(1): 390–396.

Jirawatnotai S, Hu Y, Livingston DM. Proteomic identification of a direct role for cyclin D1 in DNA damage repair. *Cancer Res* 72(17):4289–93.

Joshi M, Deshpande JD, 2010. Polymerase chain reaction: methods, principles and application. *IJBR* 1(5):81–97.

Joza N, Santos A, Susin SA, Daugas E, William L, *et al*, 2001. Essential role of the mitochondrial apoptosis-inducing factor in programmed cell death. *Nature* 410:549–559.

Kalra N, Kumar V, 2004. c-Fos is a mediator of the c-myc-induced apoptotic signaling in serum-deprived hepatoma cells via the p38 mitogen-activated protein kinase pathway. *J Biol Chem* 279(24):25313–25319.

Kaneuchi M, Yamashita T, Shindoh M, Segawa K, Takahashi S, Furuta I, *et al*, 1999. Induction of apoptosis by the p53-273L (Arg→Leu) mutant in HSC3 cells without transactivation of p21Waf1/Cip1/Sdi1 and bax. *Mol Carcinog* 26(1):44–52.

Kamarlis RK, 2009. Tampilan imunositokimia HER2/neu pada biopsi aspirasi jarum halus penderita kanker payudara. Tesis, Universitas Sumatera Utara, Medan.

Kim GS, Zeng L, Alali F, Roger LL, Wu FE, Sastrodiharjo S, Mclaughlin JL, 1998. Two new mono-tetrahydrofuran ring acetogenins, anomuricin e and muricapentocin, from the leaves of *annona muricata*. *J. Nat. Prod* 61(4):432–436.

Kim HE, Du F, Fang M, Wang X, 2005. Formation of apoptosome is initiated by cytochrome c-induced dATP hydrolysis and subsequent nucleotide exchange on Apaf-1. *Proc Natl Acad Sci USA* 102(49):17545–17550.

Kim JK, Diehl JA, 2009. Nuclear cyclin D1: An oncogenic driver in human cancer. *J Cell Physiol* 220(2):292–296.

Kitazumi I, Tsukahara M, 2011. Regulation of DNA fragmentation: the role of caspases and phosphorylation. *FEBS J* 278(3):427–441.

Knudson CM, Johnson GM, Lin Y, Korsmeyer SJ, 2001. Bax accelerates tumorigenesis in p53-deficient mice. *Cancer Res* 61(2):659–665.

Ko YM, Wu TY, Wu YC, Chang FR, Guh JY, Chuang LY, 2011. Annonacin induces cell cycle-dependent growth arrest and apoptosis in estrogen receptor- α -related pathways in MCF-7 cells. *J Ethnopharmacol* 137(3):1283–1290.

Kojima N, Tanaka T, 2009. Medicinal chemistry of annonaceous acetogenins: design, synthesis, and biological evaluation of novel analogues. *Molecules* 14:3621–3661.

Koljonen V, Tukiainen E, Haglund C, Böhling T, 2006. Cell cycle control by p21, p27 and p53 in Merkel cell carcinoma. *Anticancer Research* 26: 2209–2212.

Koss LG, Melamed MR, 2006. Koss' diagnostic cytology and its histopathologic basis. 5th ed, Philadelphia: Lippincott Williams & Wilkins, pp 1104–1130.

Kuwano K, Hara N, 2000. Signal transduction pathways of apoptosis and inflammation induced by the tumor necrosis factor receptor family. *Am J Respir Cell Mol Biol* 22(2):147–149.

Krysko DV, Berghe TV, D'Herde K, Vandenabeele P, 2008. Apoptosis and necrosis: Detection, discrimination and phagocytosis. *Methods* 44: 205–221.

Kumar V, Abbas AK, Fausto N, 2005. Robbins and Cotran pathologic basis and disease, 7th ed. Philadelphia: Elsevier Saunders, pp 269–342, 1129–1149.

Kuwana T, Newmeyer DD, 2003. Bcl-2-family proteins and the role of mitochondria in apoptosis. *Current Opinion in Cell Biology*, 15:691–699.

Lacroix M, Toillon R-A, Leclercq G, 2006. p53 and breast cancer, an update. *Endocrine-Related Cancer* 13:293–325.

Li B, Dou QP. Bax degradation by the ubiquitin/proteasome-dependent pathway: involvement in tumor survival and progression. *Proc Natl Acad Sci USA* 97(8):3850–3855.

Li N, Shi Z, Tang Y, Chen J, Xiang Li X, 2008. Recent progress on the total synthesis of acetogenins from Annonaceae. *Beilstein J Org Chem* 4(48):1–62.

Liang YJ, Zhang X, Dai CL, Zhang JY, Yan YY, Zeng MS, *et al*, 2009. Bullatacin triggered ABCB1-overexpressing cell apoptosis via the mitochondrial-dependent pathway. *Journal of Biomedicine and Biotechnology* 1:1–9.

Liu F-T, Agrawal SG, Gribben JG, Ye H, Du M-Q, Newland AC, *et al*, 2008. Bortezomib blocks Bax degradation in malignant B cells during treatment with TRAIL. *Blood* 111:2797–2805.

Liu J, Chen S, Lv L, Song L, Guo S, Huang S, 2013. Recent progress in studying curcumin and its nano-preparations for cancer therapy. *Curr Pharm Des* 19(11):1974–93.

Liu YQ, Cheng X, Guo LX, Mao C, Chen YJ, Liu HX, *et al*, 2012. Identification of an annonaceous acetogenin mimetic, AA005, as an AMPK activator and autophagy inducer in colon cancer cells. *Plos one* 7(10):1–11.

Lo YMD, Chiu RWK, Chan KCA, 2006. Clinical application of PCR Second edition. Humana Press. Totowa, New Jersey.

Malumbres M, Barbacid M, 2005. Mammalian cyclin-dependent kinases. *TRENDS in Biochemical Sciences* 30:630–641.

Mao SY, Javois LC, Kent UM. Overview of Antibody Use in Immunocytochemistry. Dalam: Javois LC, editors. *Methods in Molecular Biology. Immunocytochemical Methods and Protocols*. Humana Press Inc.: Totowa, New Jersey.

Matsui Y, Takefumi T, Yonezawa YK, Takemura M, Fugawara F, Yoshida H, *et al*, 2010. The relationship between the molecular structure of natural acetogenins and their inhibitory activities which affect DNA polymerase, DNA topoisomerase and human cancer cell growth. *Experimental and Therapeutic Medicinal* 1:19–26.

McDonald M, Herzt RP, Lowenthal SWP, 2008. The burden of cancer in Asia. Japan: Pfizer, pp 1–92.

McLaughlin JL, 2008. Paw paw and cancer: annonaceous acetogenins from discovery to commercial products. *J Nat Prod* 71:1311–1321.

Melnikova VO, Annantheswamy HN, 2006. p53 Protein and Non melanoma Skin Cancer. in: Reichrath J, editor. *Molecular Mechanisms of Basal Cell and Squamous Cell Carcinomas*. New York: Springer.

Miyashita T, Krajewski S, Krajewska M, Wang HG, Lin HK, Liebermann DA, *et al*, 1994. Tumor suppressor p53 is a regulator of bcl-2 and bax gene expression in vitro and in vivo. *Oncogene* 9(6):1799–1805.

Moghadamtousi SZ, Kadir HA, Paydar M, Rouhollahi E, Karimian H, 2014. *Annona muricata* leaves induced apoptosis in A549 cells through mitochondrial-mediated pathway and involvement of NF- κ B. *BMC Complementary and Alternative Medicine* 14(299):1–13.

Mollereau B, Ma D, 2014. The p53 control of apoptosis and proliferation: lessons from *Drosophila*. *Apoptosis* 19:1421–1429.

Muhartono, Hanriko R, 2012. Korelasi antara imunoekspresi p53 dan respons kemoterapi neoadjuvan regimen fluororasil, adriamisin, dan siklofosfamid pada karsinoma duktus payudara invasif. *MKB* 44(1):13–8

Mukherjee S, Koner BC, Ray S, Ray A, 2006. Environmental contaminants in pathogenesis of breast cancer. *Ind J Exp Biol* 44:597–617.

Narayan RS, Borhan B, 2006. Synthesis of the proposed structure of mucosin via regio and stereoselective tetrahydrofuran ring-forming strategies. *J Org Chem* 71(4):1416–1429.

Nelsen CJ, Rickheim DG, Tucker MM, Hansen LK, Albrecht JH, 2003. Evidence that cyclin D1 mediates both growth and proliferation downstream of TOR in hepatocytes. *The Journal Of Biological Chemistry* 278(6):3656–3663.

Ng CH, Pathy NB, Taib NA, Teh YC, Mun KS, Amiruddin A, *et al*, 2011. Comparison of breast cancer in Indonesia and Malaysia–a clinico–pathological study between Dharmais Cancer Centre Jakarta and University Malaya Medical Centre, Kuala Lumpur. *Asian Pacific J Cancer Prev* 12:2943–2946.

Nicoll G, Crichton DN, McDowell HE, Kernohan N, Hupp TP, Thompson AM, 2001. Expression of the hypermethylated in cancer gene (HIC–1) is associated with good outcome in human breast cancer. *British Journal of Cancer* 85(12): 1878–1882.

Nicolier M, Decrion–Barthod A, Launay S, Pretet J, Mougin C, 2009. Spatiotemporal activation of caspase dependent and independent pathways in staurosporine–induced apoptosis of p53^{wt} and p53^{mt} human cervical carcinoma cells. *Biol Cell* 101(8):455–467.

Nikoletopoulou V, Markaki M, Palikaras K, Tavernarakis N, 2013. Review Crosstalk between apoptosis, necrosis and autophagy. *Biochimica et Biophysica Acta (BBA) – Molecular Cell Research* 1833(12): 3448–3459.

Ou Y–H, Chung P–H, Sun T–P, Shieh S–Y, 2005. p53 C–Terminal phosphorylation by CHK1 and CHK2 participates in the regulation of DNA–damage–induced C–terminal acetylation. *Molecular Biology of the Cell* 16:1684–1695.

Owa T, Yoshino H, Yoshimatsu K, Nagasu T, 2001. Cell cycle regulation in the G1 phase: a promising target for the development of new chemotherapeutic anticancer agents. *Curr Med Chem* 8(12):1487–503.

Ozaki T, Nakagawara A, 2011. Role of p53 in cell death and human cancers. *cancer* 3:994–1013.

Pardhasaradhi BVV, Reddy M, Ali AM, Kumari AL, Khar A, 2005. Differential cytotoxic effects of annona squamosa seed extracts on human tumour cell lines: role of reactive oxygen species and glutathione. *J Biosci* 30(2):101–108.

Perou CM, Sorlie T, Eisen MB, Rijn M, Jeffrey SS, Rees CA, *et al*, 2000. Molecular portraits of human breast tumours. *Nature* 406(6797):747–752.

Pestel RG, 2013. Review: new roles of cyclin D1. *The American Journal of Pathology* 183(1):1–9.

Peurala E, Koivunen P, Haapasaari K-M, Bloigu R, Jukkola-Vuorinen A, 2013. The prognostic significance and value of cyclin D1, CDK4 and p16 in human breast cancer. *Breast Cancer Research* 15:1-10.

Pomper KW, Lowe JD, Crabtree SB, Keller W, 2009. Identification of annonaceous acetogenins in the ripe fruit of the North American pawpaw (*Asimina triloba*). *J Agric Food Chem* 57:8339-8343.

Pourkarimi E, Greiss S, Gartner A, 2012. Evidence that CED-9/Bcl2 and CED-4/Apaf-1 localization is not consistent with the current model for *C. elegans* apoptosis induction. *Cell Death and Differentiation* 19:406-415.

Pozarowski P, Darzynkiewicz Z, 2013. Analysis of Cell Cycle by Flow Cytometry. Dalam: Schonthal AH, editors. *Methods in molecular biology*. Humana Press Inc.: Totowa, New Jersey. pp. 301-311.

Prakoeswa CRS, 2008. Peran p53 pada Patogenesis Karsinoma Sel Basal (The Role of p53 in the Pathogenesis of Basal Cell Carcinoma). *Berkala Ilmu Kesehatan Kulit dan kelamin* 20(3):261-265.

Qian J-Q, Sun P, Pan Z-Y, Fang Z-Z, 2015. Annonaceous acetogenins reverses drug resistance of human hepatocellular carcinoma BEL-7402/5-FU and HepG2/ADM cell lines. *Int J Clin Exp Pathol* 8(9):11934-11944.

Qi Y, Tu Y, Yang D, Chen Q, Xiao J, Chen Y, *et al*, 2007. Cyclin A but not cyclin d1 is essential for c-myc-modulated cell-cycle progression. *journal of cellular physiology* 210:63-71.

Rachmani EPN, Suhesti TS, Widiastuti R, Adityono, 2012. The breast of anticancer from leaf extract of *annona muricata* against cell line in T47D. *International Journal of Applied Science and Technology* 2(1):157-164.

Rachmawati E, Karyono S, Suyuti H, 2012. The effect of *annona muricata* leaf on proliferation and apoptosis of HeLa cells mediated by p53. *Jurnal Kedokteran Brawijaya* 27(1):28-32.

Rahman MT, Uddin MS, Sultana R, Moue A, Setu M, 2013. Polymerase Chain Reaction (PCR): a short review. *AKMMC J* 4(1):30-36.

Raman V, Martensen SA, Reisman D, Evron E, Odenwald WF, Jaffee E, Marks J, Sukumar S, 2000. Compromised HOXA5 function can limit p53 expression in human breast tumours. *Nature* 405(6789):974-8.

Rautajoki KJ, Marttila EM, Nyman TA, Lahesmaa R, 2007. Interleukin-4 inhibits caspase-3 by regulating several proteins in the fas pathway during initial stages of

human T helper 2 cell differentiation. *Molecular & Cellular Proteomics* 6:238–251.

Reed JC, 2006. Proapoptotic multidomain Bcl-2/Bax-family proteins: mechanisms, physiological roles, and therapeutic opportunities. *Cell Death and Differentiation* 3:1378–1386.

Retnani V, 2011. Pengaruh suplementasi ekstrak daun annona muricata terhadap kejadian dysplasia epitel kelenjar payudara tikus spraque dawley yang diinduksi 7, 12 Dimethylbenz[α]anthracene. Tesis, Universitas Diponegoro, Semarang.

Ricci MS, Zong W-X, 2006. Chemotherapeutic Approaches for Targeting Cell Death Pathways. *Oncologist* 11(4):342–357.

Rocha S, Martin AM, Meek DW, Perkins ND, 2003. p53 represses cyclin D1 transcription through down regulation of Bcl-3 and inducing increased association of the p52 NF-kappaB subunit with histone deacetylase 1. *Mol Cell Biol* (13):4713–4727.

Rosai J, 2005. *Surgical pathology*. 10th ed, Edinburgh: Mosby Elsevier, pp 1696–1708.

Ross JS, Fletcher JA, Linette GP, Stec J, Clark E, Ayers M, *et al*, 2003. The Her-2/neu gene and protein in breast cancer 2003: biomarker and target of therapy. *Oncologist* 8(4):307–325.

Rother K, Kirschner R, Sanger K, Bohlig L, Mossner J, Engeland K, 2007. p53 downregulates expression of the G₁/S cell cycle phosphatase Cdc25A. *Oncogene* 26:1949–1953.

Sakaguchi K, Herrera JE, Saito S, Miki T, Bustin M, Vassilev A, *et al*, 1998. DNA damage Activates p53 through a Phosphorylation-acetylation Cascade. *Genes Dev* 15(12): 1677–1679.

Saldana-Meyer R, Recillas-Targa F, 2011. Transcriptional and epigenetic regulation of the p53 tumor suppressor gene. *Epigenetics* 6(9):1068–1077.

Sarkar S, Mandal M, 2009. Growth factor receptors and apoptosis regulators: signaling pathways, prognosis, chemosensitivity and treatment outcomes of breast cancer. *Basic and Clinical Research* 3:47–60.

Schoofs T, Berdel WE, Muller-Tidow C, 2014. Spotlight on Epigenetics in Hematologic Malignancies. Origins of aberrant DNA methylation in acute myeloid leukemia. *Leukemia* (2014) 28:1–14.

Shaulsky G, Ben-Zeev A, and Rotter V, 1990. Subcellular Distribution of the p53 Protein during the Cell Cycle of Balb/c 3T3 Cells. *Oncogene* 5(11):1707–11.

Shelton SN, Dillard CD, Robertson JD, 2010. Activation of caspase-9, but not caspase-2 or caspase-8, is essential for heat-induced apoptosis in jurkat cells. *Journal of Biological Chemistry* 285(52):40525–40533.

Shu XO, Moore DB, Cai Q, Cheng J, Wen W, Pierce L, *et al*, 2005. Association of cyclin D1 genotype with breast cancer risk and survival. *Cancer Epidemiol Biomarker* 14(1):91–97.

Siegel R, Naishadham D, Jemal A, 2013. Cancer statistics 2013. *Ca Cancer J Clin* 63:11–30.

Sherr CJ, McCormick F, 2002. The RB and p53 pathways in cancer. *Cancer Cell* 2(2):103–112.

Shintani M, Okazaki A, Masuda T, Kawada M, Ishizuka M, Doki Y, *et al*. Overexpression of cyclin D1 contributes to malignant properties of esophageal tumor cells by increasing VEGF production and decreasing Fas expression. *Anticancer Res* 22(2):639–647.

Slingerland J, Pagano M, 2000. Regulation of the Cdk inhibitor P27 and its deregulation in cancer. *Journal Of Cellular Physiology* 183:10–17.

Souza ACVM, Souza DRV, Sanabani SS, Giorgi RR, Bendi I, 2009. The performance of semi-quantitative differential PCR is similar to that of real-time PCR for the detection of the MYCN gene in neuroblastomas. *Brazilian Journal of Medical and Biological Research* 42(9): 791–795.

Spiliotaki M, Mavroudis D, Kapranou K, Markomanolaki H, Kallergi G, Koinis F, *et al*, 2014. Evaluation of proliferation and apoptosis markers in circulating tumor cells of women with early breast cancer who are candidates for tumor dormancy. *Breast Cancer Research* 16(485):1–13.

Sprowl JA, Reed K, Armstrong SR, Lanner C, Guo B, Kalatskaya I, *et al*, 2012. Alterations in tumor necrosis factor signaling pathways are associated with cytotoxicity and resistance to taxanes: a study in isogenic resistant tumor cells. *Breast Cancer Res* 14(1):1–18.

Stacey DW, 2003. Cyclin D1 serves as a cell cycle regulatory switch in actively proliferating cells. *Current Opinion in Cell Biology* 15:158–163.

Stahnke K, Eckhoff S, Mohr A, Meyer LH, Debatin KM, 2003. Apoptosis induction in peripheral leukemia cells by remission induction treatment in vivo:

selective depletion and apoptosis in a CD34+ subpopulation of leukemia cells. *Leukemia* 17(11):2130–2139.

Strehl P, Schumacher K, Vries UD, Minuth, WW, 2002. Proliferating cells versus differentiated cells in tissue engineering. *Tissue Engineering* 8(1):1–6.

Sturm I, Papadopoulos S, Hillebrand T, Benter T, Luck HJ, Wolff G, *et al*, 2000. Impaired BAX protein expression in breast cancer: mutational analysis of the BAX and the p53 gene. *Int J Cancer* 87(4):517–521.

Suryadinata R, Sadowski M, Steel R, Sarcevic B, 2011. Cyclin-dependent Kinase-mediated phosphorylation of RBP1 and pRb promotes their dissociation to mediate release of the SAP30-mSin3-HDAC transcriptional repressor complex. *The Journal Of Biological Chemistry* 286(7): 5108–5118.

Suzuki M, Youle RJ, Tjandra N. Structure of Bax: coregulation of dimer formation and intracellular localization. *Cell* 103(10):645–654.

Takimoto R, El-Deiry WS, 2000. Wild-type p53 transactivates the KILLER/DR5 gene through an intronic sequence-specific DNA binding site. *Oncogene* 19(14):1735–1743.

Tashiro E, Tsuchiya A, Imoto M, 2007. Functions of cyclin D1 as an oncogene and regulation of cyclin D1 expression. *Cancer Sci* 98(5):629–635.

Taneja P, Maglic D, Kai F, Zhu S, Kendig PD, Fry EA, Inoue K, 2010. Classical and novel prognostic markers for breast cancer and their clinical significance. *Clin Med Insights Oncol* 4:15–34.

Thomadaki H, Scorilas A, 2006. BCL2 family of apoptosis-related genes: functions and clinical implications in cancer. *Critical Reviews in Clinical Laboratory Sciences*, 43(1):1–67.

Torres MP, Rachagani S, Purohit V, Pandey P, Joshi S, Moore ED, *et al*, 2012. Graviola: A novel promising natural-derived drug that inhibits tumorigenicity and metastasis of pancreatic cancer cells in vitro and in vivo through altering cell metabolism. *Cancer Letters* 323(1):29–40.

Underwood JCE, 2000. *Patologi umum dan sistemik*. Ed 2, Jakarta: EGC, hlm 200–230.

Neve RM, Chin K, Fridlyand J, Yeh J, Baehner FL, Fevr T, *et al*, 2006. A collection of breast cancer cell lines for the study of functionally distinct cancer subtypes. *Cancer cell* 10(6):515–27.

Vara JAR, 2005. Review article technical aspects of immunohistochemistry. *Vet Pathol* 42(4):405–426.

Villo P, 2008. Synthesis of acetogenin analogues. Thesis, University of Tartu, Tartu Estonia.

Vousden KH, Lu X, 2002. Live or let die: the cell's response to p53. *Nat Rev Cancer* 2: 594–604.

Wang LQ, Nakamura N, Meselhy MR, Hattori M, Zhao WM, Cheng KF, *et al*, 2000. Four mono-tetrahydrofuran ring acetogenins, montanacins B–E, from *Annona montana*. *Chem Pharm Bull* 48(8):1109–1113.

Walensky LD, Gavathionis E, 2011. BAX unleashed: the biochemical transformation of an inactive cytosolic monomer into a toxic mitochondrial pore. *Trends Bioschem Sci* 36(12):642–652.

Westphal D, Kluck RM, Dewson G, 2014. Building blocks of the apoptotic pore: how Bax and Bak are activated and oligomerize during apoptosis. *Cell Death and Differentiation* 21(2014):196–205.

Wiman KG, 2013. p53 talks to PARP: the increasing complexity of p53-induced cell death. *Cell Death and Differentiation*, 20:1438–1439.

Wu M, Ding H–F, Fisher DE, 2001. Apoptosis: molecular mechanisms. *encyclopedia of life sciences* 2001:1–8.

Yager JD, Davidson NE, 2006. Estrogen carcinogenesis in breast cancer. *N Engl J Med* 354(3):270–82.

Yang H–Y, Wen Y–Y, Chen C–H, Lozano G, Lee M–H, 2003. 14–3–3 σ positively regulates p53 and suppresses tumor growth. *Mol Cell Biol* 23(20): 7096–7107.

Yuan SSF, Chang HL, Chen HW, Kuo FC, Liaw CC, Su JH, Wu YC, 2006. Selective cytotoxicity of squamocin on T24 bladder cancer cells at the S-phase via a Bax, Bad, and caspase–3 related pathways. *Life Sciences* 78:869–874.

Yuan SSF, Chang HL, Chen HW, Yeh YT, Kao YH, Lin KH, Wu YC, Su JH, 2003. Annonacin, a mono-tetrahydrofuranacetogenin, arrests cancer cells at the G1 phase and causes cytotoxicity in a Bax and caspase–3 related pathway. *Life Sci* 72(25):2853–2861.

Yu Z, Wang H, Zhang L, Tang A, Zhai Q, Wen J, *et al*, 2009. Both p53–PUMA/NOXA–Bax–mitochondrion and p53–p21cip1 pathways are involved in

the CDglyTK-mediated tumor cell suppression. *Biochemical and Biophysical Research Communications* 386(4):607–611.

Yu Q, Geng Y, Sicinski P, 2001. Specific protection against breast cancer by cyclin D1 ablation. *Nature* 411:1017–21.

Zeng L, Ye Q, Oberlies NH, Shi G, Gu ZM, He K, McLaughlin JL, 1996. Recent advances in annonaceous acetogenins. *Nat. Prod. Rep* 13:275–306.

Zhan S-S, Jiang JX, Wu J, Halsted C, Friedman SL, Zern MA, Torok NJ, 2006. Phagocytosis of apoptotic bodies by hepatic stellate cells induces NADPH oxidase and is associated with liver fibrosis in vivo. *Hepatology* 43:435–443.

Zhang G, Gurtu V, Kain SR, Yan G, 1997. Early detection of apoptosis using a fluorescent conjugate of annexin V. *BioTechniques* 23:525–531.

Zhang X, Zhao M, Huang AY, Fei Z, Zhang W, Wang XL, 2005. The effect of cyclin D expression on cell proliferation in human gliomas. *J Clin Neurosci.* 12(2):166–168.

Zheng J, 2012. Energy metabolism of cancer: Glycolysis versus oxidative phosphorylation (Review). *Oncol Lett* 4(6): 1151–1157.

Zhou J, Ahn J, Wilson SH, Prives C, 2001. A role for p53 in base excision repair. *EMBO J* 20: 914–923.

Zhu Y, Wang A, Liu MC, Zwart A, Lee RY, Gallagher A, *et al*, 2006. Estrogen receptor alpha positive breast tumors and breast cancer cell lines share similarities in their transcriptome data structures. *Int J Oncol* 29(6):1581–1589.

Zong W-X, Thompson CB, 2006. Necrotic death as a cell fate. *Genes & Development* 20:1–15.

