

DAFTAR PUSTAKA

1. Bray F, Laversanne M, Sung H, Ferlay J, Siegel RL, Soerjomataram I, dkk. Global Cancer Statistics 2022: GLOBOCAN Estimates of Incidence and Mortality Worldwide for 36 Cancers in 185 Countries. *CA Cancer J Clin.* 2024;74(3):229–63.
2. World Health Organization. The Top 10 Causes of Death [Internet]. WHO. 2024 [diakses pada 25 November 2024]. Laman: <https://www.who.int/news-room/fact-sheets/detail/the-top-10-causes-of-death>.
3. Badan Kebijakan Pembangunan Kesehatan. Survei Kesehatan Indonesia (SKI) 2023 dalam Angka. Jakarta: Kemenkes RI; 2023.
4. Ferlay J, Ervik M, Lam F, Laversanne M, Colombet M, Mery L, dkk. Global Cancer Observatory: Cancer Today. France: International Agency for Research on Cancer; 2024.
5. Workman ML, Winkelman C. Genetic Influences in Common Respiratory Disorders. *Crit Care Nurs Clin North Am.* 2008;20(2):171–89.
6. Alao JP. The Regulation of Cyclin D1 Degradation: Roles in Cancer Development and the Potential for Therapeutic Invention. *Mol Cancer.* 2007;6(24):1–6.
7. Hanahan D. Hallmarks of Cancer: New Dimensions. *Cancer Discov.* 2022;12(1):31–46.
8. Chen S, Li L. Degradation Strategy of Cyclin D1 in Cancer Cells and the Potential Clinical Application. *Front Oncol.* 2022;12:1–10.
9. Gautschi O, Ratschiller D, Gugger M, Betticher DC, Heighway J. Cyclin D1 in Non-Small Cell Lung Cancer: A Key Driver of Malignant Transformation. *Lung Cancer.* 2007;55(1):1–14.
10. NIH. Non-Small Cell Lung Cancer Treatment (PDQ®)–Health Professional Version [Internet]. National Cancer Institute. 2024 [diakses pada 30 November 2024]. Laman: https://www.cancer.gov/types/lung/hp/non-small-cell-lung-treatment-pdq#_514.
11. Kemenkes RI. Pedoman Nasional Pelayanan Kedokteran Tata Laksana Kanker Paru. Jakarta: Kemenkes RI; 2023.
12. Lee PJ, Mallik R. Cardiovascular Effects of Radiation Therapy: Practical Approach to Radiation Therapy-Induced Heart Disease. *Cardiol Rev.* 2005;13(2):80–6.

13. Cherif H, Bacha S, Habibeche S. Chemotherapy Toxicity in Advanced Non-Small Cell Lung Cancer and Its Impact on Survival. *European Respiratory Journal*. 2016;48(60).
14. Horibe S, Matsuda A, Tanahashi T, Inoue J, Kawauchi S, Mizuno S, dkk. Cisplatin Resistance in Human Lung Cancer Cells is Linked with Dysregulation of Cell Cycle Associated Proteins. *Life Sci*. Maret 2015;124:31–40.
15. Oguri T, Ozasa H, Uemura T, Bessho Y, Miyazaki M, Maeno K, dkk. MRP7/ABCC10 Expression is A Predictive Biomarker for the Resistance to Paclitaxel in Non-Small Cell Lung Cancer. *Mol Cancer Ther*. 2008;7(5):1150–5.
16. Bessho Y, Oguri T, Ozasa H, Uemura T, Sakamoto H, Miyazaki M, dkk. ABCC10/MRP7 is Associated with Vinorelbine Resistance in Non-Small Cell Lung Cancer. *Oncol Rep*. 2009;21(1):263–8.
17. Yang S, Yu KH, Palmer N, Fox K, Kou SC, Kohane IS. Autoimmune Effects of Lung Cancer Immunotherapy Revealed by Data-Driven Analysis on a Nationwide Cohort. *Clin Pharmacol Ther*. 2020;107(2):388–96.
18. Darwati, Bahti HH, Supriyatna, Dachriyanus. Kowanin, Suatu Santon dari Kulit Batang *Garcinia cowa* Roxb. *Jurnal Natur Indonesia*. 2009;11(2):109–14.
19. Paudel HR, Thapa R, Poudel P. *Garcinia cowa* Roxb. ex Choisy. Dalam: Belwal T, Bhatt I, Devkota H, editor. *Himalayan Fruits and Berries: Bioactive Compounds, Uses and Nutraceutical Potential*. Elsevier; 2022. hlm. 197–203.
20. Panthong K, Hutadilok-Towatana N, Panthong A. Cowaxanthone F, a New Tetraoxygenated Xanthone, and Other Anti-Inflammatory and Antioxidant Compounds from *Garcinia cowa*. *Can J Chem*. 2009;87(11):1636–40.
21. Mahabusarakam W, Chairerk P, Taylor WC. Xanthones from *Garcinia cowa* Roxb. *Latex. Phytochemistry*. Mei 2005;66(10):1148–53.
22. Ritthiwigrom T, Laphookhieo S, Pyne SG. Chemical Constituents and Biological Activities of *Garcinia cowa* Roxb. *Maejo International Journal of Science and Technology*. 2013;7(2):212–31.
23. Hefni D, Dachriyanus, Wahyuni FS, Yerizel E, Arisanty D, Yusra LN. Cowanin, a Cytotoxic Xanthone from Asam Kandis (*Garcinia cowa*, Roxb.) Reduced Cell Migration and Induced Cell Cycle Arrest on T47D Human Cancer Cell. *Int J Adv Sci Eng Inf Technol*. 2020;10(5):2164–9.
24. Wahyuni FS, Shaari K, Stanslas J, Lajis NH, Hamidi D. Cytotoxic Properties and Complete Nuclear Magnetic Resonance Assignment of Isolated

- Xanthones From the Root of *Garcinia cowa* Roxb. *Pharmacogn Mag.* 2016;12(45):S52–6.
25. Hefni D, Dachriyanus, Nahda AM, Wahyuni FS. Effect of Cowanin on Cyclin D1 Expression in MCF-7/HER2 Breast Cancer Cells. *International Journal of Applied Pharmaceutics.* 2024;16(1):149–51.
 26. Mahmood T, Yang PC. Western Blot: Technique, Theory, and Trouble Shooting. *N Am J Med Sci.* 2012;4(9):429–34.
 27. Merza J, Aumond MC, Rondeau D, Dumontet V, Le Ray AM, Séraphin D, dkk. Prenylated Xanthones and Tocotrienols from *Garcinia virgata*. *Phytochemistry.* 2004;65:2915–20.
 28. Wahyuni FS, Suhatri N, Susanti M, Hefni D, Dachriyanus. Potensi Sitotoksik Senyawa Santon dari Tumbuhan *Garcinia cowa* Roxb terhadap Sel Kanker Payudara T47D. Padang: Andalas University Press; 2020.
 29. POWO. *Garcinia cowa* Roxb ex Choisy [Internet]. Royal Botanic Garden. 2024 [diakses pada 1 Oktober 2024]. Laman: <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:427902-1>.
 30. Wanna C, Boonman N, Phakpaknam S. Antioxidant and Antidiabetic Properties of *Garcinia cowa* Roxb. Extracts from Leaves, Fruit Rind, and Stem Bark in Different Solvents. *Plant Science Today.* 2023;10(3):430–8.
 31. Devi HL, Das B, Angami T, Kandpal BK. *Garcinia cowa* Roxb. ex Choisy (Clusiaceae). Dalam: Ajit Arun, Pooja Bohra, editor. *Perennial Underutilized Horticultural Species of India*. Delhi: Jaya Publishing House; 2021.
 32. Lim TK. *Garcinia cowa*. *Edible Medicinal And Non-Medicinal Plants.* 2012;2:29–34.
 33. Sri Wahyuni F, Shaari K, Stanslas J, Hj Lajis N. Cytotoxic xanthones from the stem bark of *Garcinia cowa* Roxb. 2015;7(1):227–36.
 34. Nguyen AK, Dinh HT, Pham LQ, Tran TT. Tetraoxygenated Xanthones from the Latex of *Garcinia cowa* Growing in Vietnam. *Vietnam J Sci Technol.* Oktober 2018;56(5):560–6.
 35. NCBI. Pubchem Compound Summary for CID 11754819, Cowanin [Internet]. National Center for Biotechnology Information. 2024. [diakses pada 3 November 2024]. Laman: <https://pubchem.ncbi.nlm.nih.gov/compound/Cowanin>.
 36. Chowchaikong Bsc N, Nilwarangoon Phd S, Tanjapatkul Phd N, Laphookhieo Phd S, Watanapokasin R. Apoptosis Induction in Breast Cancer Cells by Cowanin. *J Med Assoc Thai.* 2017;100:7–12.

37. Agustin T. Potensi Metabolit Aktif dalam Sayuran Cruciferous untuk Menghambat Pertumbuhan Sel Kanker. *Jurnal Penelitian Perawat Profesional*. 2020;2(4):459–72.
38. Cooper GM. *Sel: Pendekatan Molekuler*. 2 ed. Sunderland: Sinauer Associates; 2000.
39. Hanahan D, Weinberg RA. Hallmarks of Cancer: The Next Generation. *Cell*. 2011;144(5):646–74.
40. Kontomanolis EN, Koutras A, Syllaios A, Schizas D, Mastoraki A, Garmpis N, dkk. Role of Oncogenes and Tumor-suppressor Genes in Carcinogenesis: A review. *Anticancer Research*. 2020;40:6009-6015.
41. Rahmawati S. Peran Onkogen dan Tumor Suppressor Gene pada Karsinogenesis. *JK Unila*. 2021;5(1):61–8.
42. Wang LH, Wu CF, Rajasekaran N, Shin YK. Loss of Tumor Suppressor Gene Function in Human Cancer: An Overview. *Cellular Physiology and Biochemistry*. 2019;51(6):2647–93.
43. Koya AI, Ibrahim SA. *Carcinogenesis*. Treasure Island: StatPearls Publishing; 2024.
44. Baba AI, Catoi C. *Comparative Oncology*. Bucharest: The Publishing House of The Romanian Academy; 2007.
45. Adam VR, Hecht KA. Lung Cancer. Dalam: DiPiro JT, Yee GC, Posey LM, Haines ST, Nolin TD, Ellingrod VL, editor. *Pharmacotherapy A Pathophysiologic Approach*. 11th Edition. USA: McGraw Hill; 2020. hlm. 6480–1.
46. Kodaz CE. Lung Cancer Risk Factors - A Review Article. *Eurasian Journal of Medical Advances*. 2022;2(4):159–62.
47. Schabath MB, Cote ML. Cancer Progress and Priorities: Lung Cancer. *Cancer Epidemiology Biomarkers and Prevention*. 2019;28(10):1563–79.
48. Agonsanou H, Figueiredo R, Bergeron M. Risk Factors for the Development of Lung Cancer Around the World: a Review. *Explor Med*. 2023;4(6):1168–88.
49. De Groot PM, Wu CC, Carter BW, Munden RF. The Epidemiology of Lung Cancer. *Transl Lung Cancer Res*. 2018;7(3):220–33.
50. Malhotra J, Malvezzi M, Negri E, La Vecchia C, Boffetta P. Risk Factors for Lung Cancer Worldwide. *European Respiratory Journal*. September 2016;48(3):889–902.

51. Siddiq, Vaqar S, Siddiqui AH. Lung Cancer [Internet]. Treasure Island: StatPearls Publishing; 2023. Tersedia pada: <https://www.ncbi.nlm.nih.gov/books/NBK482357/>
52. Zappa C, Mousa SA. Non Small Cell Lung Cancer: Current Treatment and Future Advances. *Transl Lung Cancer Res*. 2016;5(3):288–300.
53. Basumalik N, Agarwal M. Small Cell Lung Cancer. Treasure Island: StatPearls Publishing; 2023.
54. Almaki SG. The Pathophysiology of the Cell Cycle in Cancer and Treatment Strategies Using Various Cell Cycle Checkpoint Inhibitor. *Pathol Res Pract*. 2023;251.
55. Wang Z. Regulation of Cell Cycle Progression by Growth Factor-Induced Cell Signaling. *Cells*. 2021;10(12).
56. Ferry I, Kuzan-Fischer CM, Ernoult E, Rutka JT. Targeting Cell Cycle Proteins in Brain Cancer. Dalam: *Handbook of Brain Tumor Chemotherapy, Molecular Therapeutics, and Immunotherapy: Second Edition*. Elsevier Inc.; 2018. hlm. 271–90.
57. Rehman I, Gulani A, Farooq M, Simpson B. Genetika, Mitosis. Treasure Island: StatPearls Publishing; 2024 [Internet]. Tersedia pada: <https://www.ncbi.nlm.nih.gov/books/NBK482449/>
58. Figel S, Robert A, Fenstermaker. Cell Cycle Regulation. Dalam: Newton HB, editor. *Handbook of Brain Tumor Chemotherapy, Molecular Therapeutic and Immunotherapy*. Elsevier; 2018.
59. Hidayat R, Hayati L. Regulation of Cell Cycle Rb and p53 pathway. *Biomedical Journal of Indonesia*. 6:2020.
60. Cahyanur R, Irawan C. Cyclin D1 and Chemotherapy Response. *Indonesian Journal of Cancer*. 31 Maret 2021;15(1):41N
61. Hamilton E, Infante JR. Targeting CDK4/6 in Patients with Cancer. *Cancer Treat Rev*. 2016;45:129–38.
62. Montalto FI, De Amicis F. Cyclin D1 in Cancer: A Molecular Connection for Cell Cycle Control, Adhesion and Invasion in Tumor and Stroma. *Cells*. Desember 2020;9(12):1–15.
63. Sundararajan R, Salameh T, Camarillo IG, Ramachandran RP, Natarajan A, Sankaranarayanan K. Irreversible Electroporation: a Drug-Free Cancer Treatment. Dalam: *Electroporation-Based Therapies for Cancer: From Basics to Clinical Applications*. Elsevier; 2014. hlm. 219–43.
64. Zhang W, Huang Q, Hua Z. Galangin and TRAIL Cooperate to Suppress A549 Lung Cancer Proliferation via Apoptosis and P38 MAPK Activation. *Acta Pharm Sin B*. 2012;2(6):569–74.

65. Garcia-de-Alba C. Repurposing A549 Adenocarcinoma Cells: New Options for Drug Discovery. *Am J Respir Cell Mol Biol*. 2021;64(4):405–6.
66. Ma'at S. Teknik Dasar Kultur Sel. Surabaya: Airlangga University Press; 2011.
67. Segeritz CP, Vallier L. Cell Culture: Growing Cells as Model Systems in Vitro. Dalam: *Basic Science Methods for Clinical Researchers*. Elsevier Inc.; 2017. hlm. 151–72.
68. Hayati A, Zubaidah U, Nurbani FA, Rohmatika AU, Nabilla N, Safitri M, dkk. *Kultur Sel dan Jaringan Hewan*. Surabaya: Airlangga University Press; 2023.
69. Sule R, Rivera G, Gomes A V. Western Blotting (Immunoblotting): History, Theory, Uses, Protocol and Problems. *Biotechniques*. Februari 2023;75(3):99–114.
70. Bass JJ, Wilkinson DJ, Rankin D, Phillips BE, Szewczyk NJ, Smith K, dkk. An Overview of Technical Considerations for Western Blotting Applications to Physiological Research. *Scand J Med Sci Sports*. 2017;27(1):4–25.
71. Ronderos PQ, Arango MT, Castiblanco J, Correa NE, Ortiz GM. Analysis of proteins and antibodies. Dalam: Anaya JM, Shoenfeld Y, Rojas-Villarraga A, dkk., editor. *Autoimmunity: From Bench to Bedside*. Bogota: El Rosario University Press; 2013. El Rosario University Press;
72. Meftahi GH, Bahari Z, Zarei Mahmoudabadi A, Iman M, Jangravi Z. Applications of Western Blot Technique: From Bench to Bedside. *Biochemistry and Molecular Biology Education*. 2021;49(4):509–17.
73. Ghosh R, Gilda JE, Gomes A V. The Necessity of and Strategies for Improving Confidence in the Accuracy of Western Blots. *Expert Rev Proteomics*. 2014;11(5):549–60.
74. Junedi S. Prosedur Tetap: Perhitungan Sel. *Cancer Chemoprevention Res Cent Farm UGM Yogyakarta*. 2009:1-4.
75. Thermo Scientific. RIPA Lysis and Extraction Buffer. USA: Thermo Scientific; 2020.
76. Invitrogen. Qubit 4 Fluorometer. Thermo Fisher Scientific; 2018.
77. Invitrogen. Mini Gel Tank. USA: Thermo Fisher Scientific; 2015.
78. Invitrogen. iBlot 2 Drying Blotting System. Thermo Fisher Scientific; 2019.
79. Thermo Scientific. Instructions 1-Step Ultra TMB-Blotting Solution. USA: Thermo Fisher Scientific; 2012.

80. Li Z. In Vitro Micro-Tissue and -Organ Models for Toxicity Testing. Dalam: Moo-Young M, editor. Comprehensive Biotechnology. Second Edition. Elsevier; 2011. hlm. 551–63.
81. Bakhach J. The Cryopreservation of Composite Tissues. Organogenesis. 2009;5(3):119–26.
82. Centers for Disease Control and Prevention, National Institutes of Health. Biosafety in Microbiological and Biomedical Laboratories. 6th Edition. USA: Department of Health and Human Services; 2020.
83. Gibco. Cell Culture Basic Handbook. Thermo Fisher Scientific; 2020.
84. WHO. Biological Safety Cabinets and Other Primary Containment Devices. WHO; 2020.
85. Gibco. RPMI 1640 Medium Product Information Sheet. Thermo Fisher Scientific; 2022.
86. Weiskirchen S, Schröder SK, Buhl EM, Weiskirchen R. A Beginner's Guide to Cell Culture: Practical Advice for Preventing Needless Problems. Cells. 2023;12(5):1–23.
87. Hassan SN, Ahmad F. The Relevance of Antibiotic Supplements in Mammalian Cell Cultures: Towards a Paradigm Shift. Gulhane Medical Journal. 2020;62(4):224–30.
88. Maniarasu S, R MK. A Mini-Review on CO₂ Role in Cell Culture and Medicinal Applications. Journal of Science & Theraphy. 2022;13(3):1–4.
89. B A, A J, J L, et al. Molecular Biology of the Cell. 4th Edition. New York: Garland Science; 2002.
90. Lordon B, Campion T, Gibot L, Gallot G. Impact of Trypsin on Cell Cytoplasm during Detachment of Cells Studied by Terahertz Sensing. Biophys J. 2024;123(16):2476–83.
91. Tiwari P, Mrigwani A, Kaur H, Kaila P, Kumar R, Guptasarma P. Structural-Mechanical and Biochemical Function of Classical Cadherin at Cellular Junction: A Review and Some Hypotheses. Dalam: Chattopadhyay K, Basu SC, editor. Biochemical and Biophysical Roles of Cell Surface Molecules. Singapore: Springer; 2018.
92. Fang IJ, Trewyn BG. Application of Mesoporous Silica Nanoparticles in Intracellular Delivery of Molecules and Proteins. Dalam: Duzgunes N, editor. Methods in Enzymology. Academic Press Inc.; 2012. hlm. 41–59.
93. Parisa N, Kamaluddin, Saleh I, Rosdah AA, Lusiana E, Fatmawati. Buku Ajar Farmakologi Eksperimental. Ponorogo: Uwais Inspirasi Indonesia; 2024.

94. Santoso U, Setyaningsih W, Ningrum A, Ardhi A, Sudarmanto. Analisis Pangan. Yogyakarta: Gadjah Mada University Press; 2020.
95. Harahap MR. Elektroforesis: Analisis Elektronika Terhadap Biokimia Genetika. Jurnal Ilmiah Pendidikan Teknik Elektro. 2018;2(1):21–6.
96. Thermo Scientific. Western Blotting Handbook and Troubleshooting Guide. USA: Thermo Fisher Scientific; 2007.
97. Thermo Scientific. Pierce Western Blotting Handbook and Troubleshooting Guide. USA: Thermo Fisher Scientific; 2014.
98. Collins JM, Wang D. Cytochrome P450 3A4 (CYP3A4) Protein Quantification Using Capillary Western Blot Technology and Total Protein Normalization. J Pharmacol Toxicol Methods. 2021;112:1–18.
99. NCBI. Pubchem Compound Summary for CID 5281650, Mangostin [Internet]. National Center for Biotechnology Information. 2025. [diakses pada 30 Januari 2025]. Laman: <https://pubchem.ncbi.nlm.nih.gov/compound/Mangostin>.
100. Xu Q, Ma J, Lei J, Duan W, Sheng L, Chen X, dkk. α -Mangostin Suppresses the Viability and Epithelial-Mesenchymal Transition of Pancreatic Cancer Cells by Downregulating the PI3K/Akt Pathway. Biomed Res Int. 2014;2014:1–12.
101. Iksen, Pothongsrisit S, Pongrakhananon V. Targeting the PI3K/AKT/mTor Signaling Pathway in Lung Cancer: An Update Regarding Potential Drugs and Natural Products. Molecules. 2021;26(13):1–27.
102. Ding YY, Luan JJ, Fan Y, Olatunji OJ, Song J, Zuo J. α -Mangostin Reduced the Viability of A594 Cells In Vitro by Provoking ROS Production Through Downregulation of NAMPT/NAD. Cell Stress Chaperones. Januari 2020;25(1):163–72.
103. Martínez-Limón A, Joaquin M, Caballero M, Posas F, de Nadal E. The p38 Pathway: From Biology to Cancer Therapy. Vol. 21, International Journal of Molecular Sciences. MDPI AG; 2020.