

DAFTAR PUSTAKA

- Aisyah, S. N., Sulastri, S., Retmi, R., Yani, R. H., Syafriani, E., Syukriani, L., Fatchiyah, F., Bakhtiar, A., & Jamsari, J. (2017). Suppression of *Colletotrichum gloeosporioides* by Indigenous *Phyllobacterium* and its Compatibility with Rhizobacteria. *Asian Journal of Plant Pathology*, 11(3), 139–147. <https://doi.org/10.17311/ajppaj.2017.139.147>
- Aliviameita, A., & Puspitasari, P. (2019). Buku Ajar Mata Kuliah Hematologi. *Umsida Press*, 1–56. <https://doi.org/10.21070/2019/978-623-7578-00-0>
- Arber, D. A., Orazi, A., Hasserjian, R., Thiele, J., Borowitz, M. J., Le Beau, M. M., Bloomfield, C. D., Cazzola, M., & Vardiman, J. W. (2016). The 2016 revision to the World Health Organization classification of myeloid neoplasms and acute leukemia. *Blood*, 127(20), 2391–2405. <https://doi.org/10.1182/blood-2016-03-643544>
- Ashwini, M., Murugan, S. B., Balamurugan, S., & Sathishkumar, R. (2016). Advances in molecular cloning. *Molecular Biology*, 50(1), 1–6. <https://doi.org/10.1134/S0026893316010131>
- Azouri, D., Abadi, S., Mansour, Y., Mayrose, I., & Pupko, T. (2021). Harnessing machine learning to guide phylogenetic-tree search algorithms. *Nature Communications*, 12(1), 1983. <https://doi.org/10.1038/s41467-021-22073-8>
- Barman, S., Bhattacharya, S. S., & Chandra Mandal, N. (2020). Chapter 3—Serratia. In N. Amaresan, M. Senthil Kumar, K. Annapurna, K. Kumar, & A. Sankaranarayanan (Eds.), *Beneficial Microbes in Agro-Ecology* (pp. 27–36). Academic Press. <https://doi.org/10.1016/B978-0-12-823414-3.00003-4>
- Batool, T., Makky, E. A., Jalal, M., & Yusoff, M. M. (2016). A Comprehensive Review on L-Asparaginase and Its Applications. *Applied Biochemistry and Biotechnology*, 178(5), 900–923. <https://doi.org/10.1007/s12010-015-1917-3>
- Begna, T., & Okonkwo, J. C. (2020). Role of Recombinant DNA Technology in Agriculture. *International Journal of Research in Agriculture and Forestry*, 7(12), 8–15.
- Bispo, J. A. B., Pinheiro, P. S., & Kobetz, E. K. (2020). Epidemiology and Etiology of Leukemia and Lymphoma. *Cold Spring Harbor Perspectives in Medicine*, 10(6), a034819. <https://doi.org/10.1101/cshperspect.a034819>

- Carter, M., Essner, R., Goldstein, N., & Iyer, M. (2022). Molecular Cloning and Recombinant DNA Technology. In *Guide to Research Techniques in Neuroscience* (pp. 227–243). Elsevier. <https://doi.org/10.1016/B978-0-12-818646-6.00014-2>
- Castro, D., Marques, A. S. C., Almeida, M. R., De Paiva, G. B., Bento, H. B. S., Pedrolli, D. B., Freire, M. G., Tavares, A. P. M., & Santos-Ebinuma, V. C. (2021). L-asparaginase production review: Bioprocess design and biochemical characteristics. *Applied Microbiology and Biotechnology*, 105(11), 4515–4534. <https://doi.org/10.1007/s00253-021-11359-y>
- Chaffin, D. O., & Rubens, C. E. (1998). Blue/white screening of recombinant plasmids in Gram-positive bacteria by interruption of alkaline phosphatase gene (phoZ) expression. *Gene*, 219(1–2), 91–99. [https://doi.org/10.1016/S0378-1119\(98\)00396-5](https://doi.org/10.1016/S0378-1119(98)00396-5)
- Chennamadhavuni, A., Lyengar, V., Mukkamalla, S. K. R., & Shimanovsky, A. (2023). Leukemia. In *StatPearls*. StatPearls Publishing. <http://www.ncbi.nlm.nih.gov/books/NBK560490/>
- Darvishi, F., Jahanafroz, Z., & Mokhtarzadeh, A. (2022). Microbial L-asparaginase as a promising enzyme for treatment of various cancers. *Applied Microbiology and Biotechnology*, 106(17), 5335–5347. <https://doi.org/10.1007/s00253-022-12086-8>
- Davis, A. S., Viera, A. J., & Mead, M. D. (2014). Leukemia: An Overview for Primary Care. *American Family Physician*, 89(9), 731–738.
- DeRenzo, C., Krenciute, G., & Gottschalk, S. (2018). The Landscape of CAR T Cells Beyond Acute Lymphoblastic Leukemia for Pediatric Solid Tumors. *American Society of Clinical Oncology Educational Book. American Society of Clinical Oncology Annual Meeting*, 38, 830–837. https://doi.org/10.1200/EDBK_200773
- Direktorat Jenderal Pelayanan Kesehatan. (2023). Kemkes.go.id. https://yankes.kemkes.go.id/view_artikel/2118/
- Dong, Y., Shi, O., Zeng, Q., Lu, X., Wang, W., Li, Y., & Wang, Q. (2020). Leukemia incidence trends at the global, regional, and national level between 1990 and 2017. *Experimental Hematology & Oncology*, 9(1), 14. <https://doi.org/10.1186/s40164-020-00170-6>
- Du, M., Chen, W., Liu, K., Wang, L., Hu, Y., Mao, Y., Sun, X., Luo, Y., Shi, J., Shao, K., Huang, H., & Ye, D. (2022). The Global Burden of Leukemia and Its Attributable Factors in 204 Countries and Territories: Findings from the

Global Burden of Disease 2019 Study and Projections to 2030. *Journal of Oncology*, 2022, e1612702. <https://doi.org/10.1155/2022/1612702>

Fatiah, R., Suliansyah, I., Tjong, D. H., Syukriani, L., Yunita, R., Trivano, R., Azizah, N., & Jamsari, J. (2021). Genome of *Serratia plymuthica* UBCF_13, Insight into diverse unique traits. *F1000Research*, 10, 826. <https://doi.org/10.12688/f1000research.54402.1>

Finn, R. D., Attwood, T. K., Babbitt, P. C., Bateman, A., Bork, P., Bridge, A. J., Chang, H.-Y., Dosztányi, Z., El-Gebali, S., Fraser, M., Gough, J., Haft, D., Holliday, G. L., Huang, H., Huang, X., Letunic, I., Lopez, R., Lu, S., Marchler-Bauer, A., & Mi, H. (2016). InterPro in 2017—beyond protein family and domain annotations. *Nucleic Acids Research*, 45(D1), D190–D199. <https://doi.org/10.1093/nar/gkw1107>

Garniasih, D., Susanah, S., Sribudiani, Y., & Hilmanto, D. (2022). The incidence and mortality of childhood acute lymphoblastic leukemia in Indonesia: A systematic review and meta-analysis. *PLOS ONE*, 17(6), e0269706. <https://doi.org/10.1371/journal.pone.0269706>

Ginn, S. L., Alexander, I. E., Edelstein, M. L., Abedi, M. R., & Wixon, J. (2013). Gene therapy clinical trials worldwide to 2012—An update. *The Journal of Gene Medicine*, 15(2), 65–77. <https://doi.org/10.1002/jgm.2698>

GSL Biotech LLC. (2024). *pGEM-T Easy Sequence and Map*. SnapGene. https://www.snapgene.com/plasmids/basic_cloning_vectors/pGEM-T_Easy

Griffiths, A. J.F. (2024). *recombinant DNA*. Encyclopedia Britannica. <https://www.britannica.com/science/recombinant-DNA-technology>

I-TASSER server for protein structure and function prediction. (2024). Zhanggroup.org. <https://zhanggroup.org/I-TASSER/>

Izadpanah Qeshmi, F., Homaei, A., Fernandes, P., & Javadpour, S. (2018). Marine microbial L-asparaginase: Biochemistry, molecular approaches and applications in tumor therapy and in food industry. *Microbiological Research*, 208, 99–112. <https://doi.org/10.1016/j.micres.2018.01.011>

Izah, Y. N., Octaviana, D., & Nurlaela, S. (2022). Faktor – Faktor yang Berpengaruh terhadap Deteksi Dini Kanker Leher Rahim Metode IVA di Kabupaten Banyumas (Studi di Puskesmas Cilongok I). *Jurnal Epidemiologi Kesehatan Komunitas*, 7(2), 553–561. <https://doi.org/10.14710/jekk.v7i2.13768>

- Jamaluddin, J., Alfin, A., Muzuni, M., & Arfa, Y. N. (2018). Eksplorasi Bakteri Termohalofilik Potensial Penghasil L-Asparaginase Sebagai Antikanker Di Sumber Air Panas Wawolesea. *Core.ac.uk*. oai:ojs.192.168.0.13:article/4591
- Jaskólski, M., Kozak, M., Lubkowski, J., Palm, G., & Włodawer, A. (2001). Structures of two highly homologous bacterial L-asparaginases: A case of enantiomeric space groups. *Acta Crystallographica. Section D, Biological Crystallography*, 57(Pt 3), 369–377. <https://doi.org/10.1107/s0907444900020175>
- Juluri, K. R., Siu, C., & Cassaday, R. D. (2022). Asparaginase in the Treatment of Acute Lymphoblastic Leukemia in Adults: Current Evidence and Place in Therapy. *Blood and Lymphatic Cancer: Targets and Therapy*, 12, 55–79. <https://doi.org/10.2147/BLCTT.S342052>
- Kaur, J., Kumar, A., & Kaur, J. (2018a). Strategies for optimization of heterologous protein expression in *E. coli*: Roadblocks and reinforcements. *International Journal of Biological Macromolecules*, 106, 803–822. <https://doi.org/10.1016/j.ijbiomac.2017.08.080>
- Kaur, J., Kumar, A., & Kaur, J. (2018b). Strategies for optimization of heterologous protein expression in *E. coli*: Roadblocks and reinforcements. *International Journal of Biological Macromolecules*, 106, 803–822. <https://doi.org/10.1016/j.ijbiomac.2017.08.080>
- Keykhaei, M., Masinaei, M., Mohammadi, E., Azadnajafabad, S., Rezaei, N., Saeedi Moghaddam, S., Rezaei, N., Nasserinejad, M., Abbasi-Kangevari, M., Malekpour, M.-R., Ghamari, S.-H., Haghshenas, R., Koliji, K., Kompani, F., & Farzadfar, F. (2021). A global, regional, and national survey on burden and Quality of Care Index (QCI) of hematologic malignancies; global burden of disease systematic analysis 1990–2017. *Experimental Hematology & Oncology*, 10(1), 11. <https://doi.org/10.1186/s40164-021-00198-2>
- Khan, S., Ullah, M. W., Siddique, R., Nabi, G., Manan, S., Yousaf, M., & Hou, H. (2016). Role of Recombinant DNA Technology to Improve Life. *International Journal of Genomics*, 1–14. <https://doi.org/10.1155/2016/2405954>
- Khatimah, H. (2021). Hubungan Asupan dan Kadar Serum Iodium Serta Selenium Dengan Kadar Thyroid Stimulating Hormone dan Tiroksin Bebas pada Pasien Dengan Riwayat Hipertiroid (*Doctoral dissertation*, UNS (Sebelas Maret University)).

- Lam, P., Khan, G., Stripecke, R., Hui, K. M., Kasahara, N., Peng, K.-W., & Guinn, B.-A. (2013). The innovative evolution of cancer gene and cellular therapies. *Cancer Gene Therapy*, 20(3), 141–149. <https://doi.org/10.1038/cgt.2012.93>
- Lesmanawati, N., & Qoyyimah, D. F. (2018). Tingkat Stres Ibu Yang Memiliki Anak Kanker Leukemia Di Rumah Cinta Anak Kanker Jl. Bijaksana Dalam Kota Bandung. *Jurnal Keperawatan BSI*, 6(1), Article 1. <https://doi.org/10.31311/v6i1.3222>
- Li, X., Jin, J., Guo, Z., & Liu, L. (2022). Evolution of plasmid-construction. *International Journal of Biological Macromolecules*, 209, 1319–1326. <https://doi.org/10.1016/j.ijbiomac.2022.04.094>
- Lomelino, C. L., Andring, J. T., McKenna, R., & Kilberg, M. S. (2017). Asparagine synthetase: Function, structure, and role in disease. *The Journal of Biological Chemistry*, 292(49), 19952–19958. <https://doi.org/10.1074/jbc.R117.819060>
- Maese, L., & Rau, R. E. (2022). Current Use of Asparaginase in Acute Lymphoblastic Leukemia/Lymphoblastic Lymphoma. *Frontiers in Pediatrics*, 10. <https://www.frontiersin.org/articles/10.3389/fped.2022.902117>
- Mattiuzzi, C., & Lippi, G. (2019). Current Cancer Epidemiology. *Journal of Epidemiology and Global Health*, 9(4), 217–222. <https://doi.org/10.2991/jegh.k.191008.001>
- Miller, M., Rao, J. K. Mohana., Wlodawer, A., & Grabskov, M. R. (1993). A left-handed crossover involved in amidohydrolase catalysis. *FEBS Letters*, 328(3), 275–279. [https://doi.org/10.1016/0014-5793\(93\)80943-o](https://doi.org/10.1016/0014-5793(93)80943-o)
- Nag, R., Joshi, S., Rathore, A. S., & Majumder, S. (2023). Profiling Enzyme Activity of l-Asparaginase II by NMR-Based Methyl Fingerprinting at Natural Abundance. *Journal of the American Chemical Society*, 145(19), 10826–10838. <https://doi.org/10.1021/jacs.3c02154>
- Narta, U. K., Kanwar, S. S., & Azmi, W. (2007). Pharmacological and clinical evaluation of l-asparaginase in the treatment of leukemia. *Critical Reviews in Oncology/Hematology*, 61(3), 208–221. <https://doi.org/10.1016/j.critrevonc.2006.07.009>
- Newell, P. D., Fricker, A. D., Roco, C. A., Chandransu, P., & Merkel, S. M. (2013). A Small-Group Activity Introducing the Use and Interpretation of BLAST. *Journal of Microbiology & Biology Education*, 14(2), 238–243. <https://doi.org/10.1128/jmbe.v14i2.637>

- Noviendri, D. (2007). Teknologi DNA Rekombinan Dan Aplikasinya Dalam Eksplorasi Mikroba Laut. *Squalen Bulletin of Marine and Fisheries Postharvest and Biotechnology*, 2(2), 56. <https://doi.org/10.15578/squalen.v2i2.138>
- Paysan-Lafosse, T., Blum, M., Chuguransky, S., Grego, T., Pinto, B. L., Salazar, G., Bileschi, M., Bork, P., Bridge, A., Colwell, L., Gough, J., Haft, D., Letunić, I., Marchler-Bauer, A., Mi, H., Natale, D., Orengo, C., Pandurangan, A., Rivoire, C., & Sigrist, C. J. A. (2022). InterPro in 2022. *Nucleic Acids Research*, 51(D1), D418–D427. <https://doi.org/10.1093/nar/gkac993>
- Pranata, W. S. (2023). Pemanfaatan Gliserol Lemak Hewani untuk Produksi Bioetanol pada Escherichia coli Rekombinan. *International Journal of Animal Science*, 5(03), Article 03. <https://doi.org/10.30736/asj.v5i03.107>
- Pranita, N. P., Novtarina, R., Nugroho, R. C., Himayani, R., & Ismunandar, H. (2021). Penerapan Bioteknologi DNA Rekombinan: Pengembangan Vaksinasi COVID-19. *Medical Profession Journal of Lampung*, 11(3), Article 3. <https://doi.org/10.53089/medula.v11i3.177>
- Puckett, Y., & Chan, O. (2023). Acute Lymphocytic Leukemia. *StatPearls*. <https://pubmed.ncbi.nlm.nih.gov/29083572/>
- Ramos, K. N., Ramos, I. N., Zeng, Y., & Ramos, K. S. (2018). Genetics and epigenetics of pediatric leukemia in the era of precision medicine. *F1000Research*, 7, F1000 Faculty Rev-1104. <https://doi.org/10.12688/f1000research.14634.1>
- Roy, A., Kucukural, A., & Zhang, Y. (2010). I-TASSER: A unified platform for automated protein structure and function prediction. *Nature Protocols*, 5(4), 725–738. <https://doi.org/10.1038/nprot.2010.5>
- Saadoun, I., Mahasneh, A., Odat, J. D., Al-Joubori, B., & Elsheikh, E. (2023). Cloning, sequencing, and characterizing of soil antibiotic active-producing Streptomyces species-specific DNA markers. *Saudi Journal of Biological Sciences*, 30(12), 103854. <https://doi.org/10.1016/j.sjbs.2023.103854>
- Saputri, F., Rusdi, B., & Fattah, M. (2023). Optimasi Metode Polymerase Chain Reaction (PCR) Untuk Identifikasi Polimorfisme Gen SLCO1B1 Sebagai Farmakogen Statin. *Bandung Conference Series: Pharmacy*, 145–152. <https://doi.org/10.29313/bcsp.v3i2.8381>
- Sasmito, D. E. K., Kurniawan, R., & Muhibbah, I. (2014). Karakteristik Primer pada Polymerase Chain Reaction (PCR) untuk Sekuensing DNA: Mini Review. 2014.

- Schmidt, J.-A., Hornhardt, S., Erdmann, F., Sánchez-García, I., Fischer, U., Schüz, J., & Ziegelberger, G. (2021). Risk Factors for Childhood Leukemia: Radiation and Beyond. *Frontiers in Public Health*, 9. <https://www.frontiersin.org/articles/10.3389/fpubh.2021.805757>
- Serratia plymuthica strain UBCF_13 chromosome, complete genome (2034618892). (2021). [dataset]. NCBI Nucleotide Database. <http://www.ncbi.nlm.nih.gov/nuccore/CP068771.1>
- Shah, S. G., Rashid, M., Verma, T., Ludbe, M., Khade, B., Gera, P. B., & Gupta, S. (2019). Establishing a correlation between RIN and A260/280 along with the multivariate evaluation of factors affecting the quality of RNA in cryopreserved cancer bio-specimen. *Cell and Tissue Banking*, 20(4), 489–499. <https://doi.org/10.1007/s10561-019-09782-7>
- Smirnov, V., & Warnow, T. (2021). Phylogeny Estimation Given Sequence Length Heterogeneity. *Systematic Biology*, 70(2), 268–282. <https://doi.org/10.1093/sysbio/syaa058>
- Stieglitz, E., & Loh, M. L. (2013). Genetic predispositions to childhood leukemia. *Therapeutic Advances in Hematology*, 4(4), 270–290. <https://doi.org/10.1177/2040620713498161>
- Tallei, T., Riano, E., Rembet, J., Pelealu, B., & Kolondam, B. (2016). Sequence Variation and Phylogenetic Analysis of Sansevieria trifasciata (Asparagaceae). *Bioscience Research*, 13, 1–7.
- Valentin, R., Grabow, S., & Davids, M. S. (2018). The rise of apoptosis: Targeting apoptosis in hematologic malignancies. *Blood*, 132(12), 1248–1264. <https://doi.org/10.1182/blood-2018-02-791350>
- Yang, J., Yan, R., Roy, A., Xu, D., Poisson, J., & Zhang, Y. (2015). The I-TASSER Suite: Protein structure and function prediction. *Nature Methods*, 12(1), 7–8. <https://doi.org/10.1038/nmeth.3213>