

DAFTAR PUSTAKA

- Al Ahwani, F., & Widyastuti, U. (2016). Method Development for Detection of E545A Mutation PIK3CA Gene in Breast Cancer Patients Using Tm Shift SYBR Green I qPCR. In *Indonesian Journal of Biotechnology* (Vol. 21, Issue 1).
- Ann Sinaga, L. A. P. P. (2017). *Analisis Pola Pita Andaliman (Zanthoxylum Acanthopodium D.C) Berdasarkan Primer OPD 03, OPD 20, OPC 07, OPM 20, OPN 09* (Vol. 5, Issue 1).
- Anonim. (2008). *pLUG ® and pLUG ®-Multi TA-cloning vectors were covered by Korean patent or patent pending pLUG ® TA-cloning Vector Kit pLUG ®-Multi TA-cloning Vector Kit Handbook for TA-cloning.*
- Ansiah, S. W., 2014. Naskah Publikasi Skripsi : Formulasi Sediaan Gel Antiseptik Fraksi Polar Daun Kesum (*Polygonum minus* Huds). *Fakultas Kedokteran Universitas Tanjung Pontianak.*
- Ardana, M., Aeyni, V. & Ibrahim, A., 2015. Formulasi dan optimasi Gel HPMC (Hydroxy Propyl Methyl Cellulose) Dengan Berbagai Variasi Konsentrasi. *J. Trop Pharm Chem*, 3(2).
- Ashim Malhotra. (2015). An Introduction to Pharmacogenomics. *The Foundation (Chapter 8)*, 103.
- Belinskaia, D. A., Voronina, P. A., Batalova, A. A., & Goncharov, N. V. (2020). Serum Albumin. *Encyclopedia*, 1(1), 65–75. <https://doi.org/10.3390/encyclopedia1010009>
- Bernadus, Z. G. (2019). *TRANSFORMASI PLASMID YANG MENGANDUNG GEN merB PADA Escherichia coli BL21(DE3).*
- Bhojwani, S. a. P. D., 2013. *Plant Tissue Culture: And Introductory Text.* India: Springer.
- Biswas, S. K. et al., 2011. Assesment of Cytotoxicity and Antibacterial Activities of Ethanolic Extracts of *Kalanchoe Pinnata* Linn (Family : Crassulaceae) Leaves and Stems. *International Journal of Pharmaceutical Sciences and Research*, 2(1), pp. 2605-2609.
- Brown, T. A., 2019. Gene cloning and DNA analysis. *Blackwell Publishing, Oxford*, pp. 95-99.
- C Rotinsulu, S. H., & Tallei, T. E. (2019). *TRANSFORMASI PLASMID YANG MENGANDUNG GEN merB PADA BAKTERI Escherichia coli TOP-10.*
- Chintan J. Joshi, e. a., 2022. *RESEARCH ARTICLE: What are housekeeping genes?.* Germany: PLOS Computational Biology.

- Caridi, G., Lugani, F., Angeletti, A., Campagnoli, M., Galliano, M., & Minchiotti, L. (2022). Variations in the Human Serum Albumin Gene: Molecular and Functional Aspects. In *International Journal of Molecular Sciences* (Vol. 23, Issue 3). MDPI. <https://doi.org/10.3390/ijms23031159>
- Cut Muthiadin. (2014b). *Pengantar Rekayasa Genetika*. Universitas Islam Negeri Alauddin Makassar.
- Darmadipura, M. S. (2013). *Isu etik dalam penelitian di bidang kesehatan*.
- Duc L Nguyen, e. a., 2009. *TaqMan real-time PCR quantification strategy of CYP2D6 gene copy number for the LightCycler 2.0*. s.l.:Clinica chimica acta; international journal of clinical chemistry.
- Dr. Zulfarina M.Si dan Dr.Imam Mahadi, M. S. (2019). BUKU-AJAR-BIOTEKNOLOGI-pasca. *Universitas Riau*.
- Eli Eisenberg, E. Y. L., 2013. *Human housekeeping genes, revisited*. Israel: CELL PRESS; Trends in Genetics.
- Elke Schaeffeler, M. S. M. E. a. U. M. Z., 2003. *CYP2D6 Genotyping Strategy Based on Gene Copy Number Determination by TaqMan Re*
- Ekman, E. (2021). *Implementering av farmakogenetik Med Fokus på opioider som smärtlindrande behandling*.
- Endah Rita S Dewi, D. A. W. A. Nurwahyunani. (2021). *Buku Ajar Bioteknologi*.
- GenScript. (2017). *Molecular Cloning Handbook Past, Present, and Future Techniques of Molecular Cloning*. www.GenScript.com
- Govindaraju, D. R. (2016). The chasmed gene. *Evolution: Education and Outreach*, 9(1). <https://doi.org/10.1186/s12052-016-0063-x>
- Green, M. R., & Sambrook, J. (2021). Cloning polymerase chain reaction (pcr) products: Ta cloning. *Cold Spring Harbor Protocols*, 2021(6), 242–246. <https://doi.org/10.1101/pdb.prot101303>
- Gummadi, A. C., & Guddati, A. K. (2021). Genetic Polymorphisms in Pharmaceuticals and Chemotherapy. *World Journal of Oncology*, 12(5), 149–154. <https://doi.org/10.14740/wjon1405>
- Gunawan, L. (2015). *Kloning Gen Pengkode Endo⁻²-1,3-1,4 Glukanase Bacillus subtilis subsp. spizizenii W23 pada Plasmid pMMB67EH dalam Escherichia coli Dh5± dan Escherichia coli Origami Cloning of the gene encoding Endo⁻²-1,3-1,4 Glukanase from Bacillus subtilis subsp. spizizenii W23 on Plasmid pMMB67EH into Escherichia coli DH5± and Escherichia coli Origami*.

- Hartati Imamuddin. (2011). UJI RESISTENSI BAKTERI TERHADAP HgCl₂, YANG DIISOLASIDARI TANAH PENAMBANGAN EMAS DIPONGKOR, JAWABARAT 1 [Resistance Test of Bacteria Against HgCl₂ Isolated from Soil of Gold Mining in Pongkor, West Java]. In *Berita Biologi* (Vol. 10, Issue 4).
- Hutahaean, S. , J. I. , & H. S. (2014). *PENUNTUN PRAKTIKUM BIOTEKNOLOGI*.
- Hedianti, P., Y, T. & Y, G., 2014. Optimasi Formulasi Kecap Kacang Koro Pedang Dengan Design Expert Metode D-Optimal. *Universitas Pasundan Bandung*.
- Holifah, et al., 2020. Efektivitas Antiseptik Gel Hand Sanitizer Ekstrak Etanol Pelepah pisang Kepok (*Musa paradisiaca* L) Terhadap Bakteri *Staphylococcus aureus* dan *Escherichia coli*. *Jurnal Ilmiah Medicamento*, 6(2).
- Hua YUE, X.-w. L. F.-l. Y. M.-Y. L. C. T., 2010. *Reference Gene Selection for Normalization of PCR Analysis in Chicken Embryo Fibroblast Infected with H5N1 AIV**. Wuhan: Wuhan Institute of Virology, CAS and Springer-Verlag Berlin Heidelberg.
- Istikomah, R., Nurminabari, L. & Achyadi, N. S., 2018. Optimalisasi Tortila Wrap Berbasis Tepung Kacang Hijau Menggunakan Aplikasi Design Expert Metode Mixture D-Optimal. *Universitas Pasundan Bandung*.
- Jo Edy Siswanto, T. B. E. P. V. P. Y., 2016. *Isolasi DNA pada Sampel Darah Tepi dan Swab Buccal pada Bayi Penderita ROP: Perbandingan Hasil Uji Konsentrasi dan Indeks Kemurnian*. Jakarta: s.n.
- Joni Kusnadi, E. L. A. H. M. H., 2022. *Aplikasi Teknik PCR untuk Autentikasi Halal*. Jawa Timur : Universitas Brawijaya Press.
- Jago Duda, H., Rahayu Esti Wahyuni, Mp. F., & Antonius Edy Setyawan, Mp. (2020). *BIOTEKNOLOGI BERBASIS PROYEK*.
- Kalle, E., Kubista, M., & Rensing, C. (2014). Multi-template polymerase chain reaction. In *Biomolecular Detection and Quantification* (Vol. 2, Issue C, pp. 11–29). Elsevier GmbH. <https://doi.org/10.1016/j.bdq.2014.11.002>
- Kepel, B. (2021). *Overproduction of Mercuric Reductase Protein Expressed by Synthetic merA Gene and Reduction of Inorganic Mercury HgCl₂*.
- Khan, S., Ullah, M. W., Siddique, R., Nabi, G., Manan, S., Yousaf, M., & Hou, H. (2016). Role of recombinant DNA technology to improve life. In *International Journal of Genomics* (Vol. 2016). Hindawi Publishing Corporation. <https://doi.org/10.1155/2016/2405954>
- Klinik, M. P., Pengelola, S., Ilmiah, J., & Klinik Indonesia, P. (2014). *INDONESIAN JOURNAL OF CLINICAL PATHOLOGY AND MEDICAL LABORATORY*. 20(2).

- Kralik, P., & Ricchi, M. (2017). A basic guide to real time PCR in microbial diagnostics: Definitions, parameters, and everything. In *Frontiers in Microbiology* (Vol. 8, Issue FEB). Frontiers Research Foundation. <https://doi.org/10.3389/fmicb.2017.00108>
- Lies Winarsih, A. D. S. E. (2020). Mencari Media Pemanas Autoclave yang Murah dan Bersih. *INDONESIAN JOURNAL OF LABORATORY*, 3(1), 34–38.
- Mariana Lusastuti, A., Seeger, H., Sugiani, D., Mufidah, T., Hesy Novita, dan, & Penelitian dan Pengembangan Budidaya Air Tawar Jl Raya Sempur No, B. (2015). *DETEKSI POLYMORPHISME DENGAN SUBSTITUSI NUKLEOTIDA TUNGGAL PADA Streptococcus agalactiae ISOLAT LOKAL INDONESIA* (Vol. 10, Issue 2).
- Mastutik, G., I'tishom, R., Hardjowijoto, S., & Putra, S. T. (2015). Kloning Gen Melanoma Antigen 1 (Mage-1) dari Jaringan Testis untuk Mendapatkan Plasmid Rekombinan Mage-1. *Majalah Kedokteran Bandung*, 47(4), 199–206. <https://doi.org/10.15395/mkb.v47n4.621>
- Mawardi, A., & Ramandey, E. R. P. F. (2017). Ligasi dan Transformasi Gen MSP1 Plasmodium falciparum Penyebab Malaria di Kota Jayapura. *Majalah Kedokteran Bandung*, 49(4), 213–223. <https://doi.org/10.15395/mkb.v49n4.1138>
- Mirawati, F., Abinawanto, A., Bowolaksono, A., Wulandari, D., Budiarto, B. R., Warisman, M. A., Widyowati, H., Azamris, A., Rustamadji, P., & Desriani, D. (2019). Pengaruh H₂O pH 5,2 dan TE Buffer pH 7,8, Untuk Perbaikan Efisiensi Reaksi qPCR Skoring HER-2 Kanker Payudara. *Jurnal Pendidikan Matematika Dan IPA*, 10(1), 139. <https://doi.org/10.26418/jpmipa.v10i1.27628>
- Motohashi, K. (2019). A novel series of high-efficiency vectors for TA cloning and blunt-end cloning of PCR products. *Scientific Reports*, 9(1). <https://doi.org/10.1038/s41598-019-42868-6>
- Muhammad Ridwan Harahap. (2018). *Elektroforesis: Analisis Elektronika Terhadap Biokimia Genetika*. 2(1), 21–26.
- Mohammad Abu Hena Mostafa Jamal, e. a., 2017. *Ultra-High Efficient Colony PCR for High Throughput Screening of Bacterial Genes*. s.l.:National center for biotechnology information.
- Ni Putu Sarini, e. a., 2016. *Genetika Ternak*. Denpasar, Bali: Universitas Udayana.
- Nia Natalya. (2017). OPTIMASI SUHU ANNEALING UNTUK PRIMER g-SSR DAN EST-SSR PADA KACANG HIJAU (*Vigna radiata* L.). In *Diterima: Januari*.
- Nicola Casali, A. P. (2003). *E. coli Plasmid Vectors*.

- Okwu, D. E. & Nnamdi, F. U., 2011. Two Novel Flavonoid From *Brophyllum pinnatum* and Their Antimicrobial Activity. *Journal of Chemical and Pharmaceutical Research*, 3(2), pp. 1-10.
- Pan, Q., Li, L., Yang, X., Tong, H., Xu, S., Li, Z., Li, W., Muehlbauer, G. J., Li, J., & Yan, J. (2016). Genome-wide recombination dynamics are associated with phenotypic variation in maize. *New Phytologist*, 210(3), 1083–1094. <https://doi.org/10.1111/nph.13810>
- Parodi, A., Miao, J., Soond, S. M., Rudzińska, M., & Zamyatnin, A. A. (2019). Albumin nanovectors in cancer therapy and imaging. *Biomolecules*, 9(6). <https://doi.org/10.3390/biom9060218>
- Panjaitan, E. N., A, S. & D, P., 2012. Formulasi Gel dari Ekstrak Rimpang Jahe Merah (*Zingiber officinale* Roscoe). *Journal of Pharmaceutics and Pharmacology*, 1(1), pp. 9-20.
- Pinilih, A. & Hidayat, 2014. Uji Sensitivitas Ekstrak Daun Cocor Bebek (*Kalanchoe pinnata*) Terhadap *Staphylococcus aureus*. *Jurnal Kedokteran dan Kesehatan*, 1(1).
- Pondman, K. M. v. S. R. H. a. v. d. W. J., 2015. *Accurate determination of the CYP2D6 (*1/*4)xN genotype by quantitative PCR*. s.l.:Drug Metabolism and Personalized Therapy.
- Pondman, K. M., Van Schaik, R. H. N., & Van Der Weide, J. (2018). Accurate determination of the CYP2D6 (*1/*4)xN genotype by quantitative PCR. *Drug Metabolism and Personalized Therapy*, 33(1), 33–39. <https://doi.org/10.1515/dmpt-2017-0007>
- Prakash, C., Zuniga, B., Seog Song, C., Jiang, S., Cropper, J., Park, S., & Chatterjee, B. (2015). Nuclear Receptors in Drug Metabolism, Drug Response and Drug Interactions. *Nuclear Receptor Research*, 2. <https://doi.org/10.11131/2015/101178>
- Promega. (2021). *pGEM®-T and pGEM®-T Easy Vector Systems*. www.promega.com
- Putu, N., Pertiwi, D., Mahardika, G. N. K., & Luh Watiniasih, N. (2015). OPTIMASI AMPLIFIKASI DNA MENGGUNAKAN METODE PCR (Polymerase Chain Reaction) PADA IKAN KARANG ANGGOTA FAMILI Pseudochromidae (DOTTYBACK) UNTUK IDENTIFIKASI SPESIES SECARA MOLEKULAR. *Jurnal Biologi*, 1–5.
- Radji, M., 2005. *PENDEKATAN FARMAKOGENOMIK DALAM PENGEMBANGAN OBAT BARU*. Universitas Indonesia, Depok: Majalah Ilmu Kefarmasian .
- Rowe, R. C., Sheskey, P. J. & Quinn, M. E., 2009. *Handbook of Pharmaceutical Excipients*. 6 ed. London: Pharmaceutical Press.

- Ramos, A. E., Muñoz, M., Moreno-Pérez, D. A., & Patarroyo, M. A. (2017). pELMO, an optimised in-house cloning vector. *AMB Express*, 7(1). <https://doi.org/10.1186/s13568-017-0324-2>
- Ren, J., Karna, S., Lee, H.-M., Seung, &, Yoo, M., & Na, D. (2019). Artificial transformation methodologies for improving the efficiency of plasmid DNA transformation and simplifying its use. *Applied Microbiology and Biotechnology*, 103, 9205–9215. <https://doi.org/10.1007/s00253-019-10173-x/Published>
- Ronit, A., Kirkegaard-Klitbo, D. M., Dohlmann, T. L., Lundgren, J., Sabin, C. A., Phillips, A. N., Nordestgaard, B. G., & Afzal, S. (2020). Plasma albumin and incident cardiovascular disease results from the CGPS and an updated meta-analysis. *Arteriosclerosis, Thrombosis, and Vascular Biology*, 473–482. <https://doi.org/10.1161/ATVBAHA.119.313681>
- Rustamadji, P., Wiyarta, E., & Anggreani, I. (2022). Exploring the Expression of Survivin on Neoadjuvant Chemotherapy in Invasive Breast Carcinoma. *Open Access Macedonian Journal of Medical Sciences*, 10(B), 1440–1445. <https://doi.org/10.3889/oamjms.2022.9940>
- Sanjaya, E. H., & Kimia, J. (2016). INSERSI GEN pncA KE DALAM PLASMID pGEM-T. *Journal Kimia Riset*, 1(2).
- Sambrook, J. & R., 2001. *Molecular Cloning-A Laboratory Manual*. New York: Cold Spring Harbor Laboratory Press.
- Sari, R., Nurbaeti, S. N. & Pratiwi, L., 2016. Optimasi Kombinasi Karbopol 940 dan HPMC Terhadap Sifat Fisik Gel Ekstrak dan Fraksi Metanol Daun Kesum (*Polugonum minus Huds*) Dengan Metode Simplex Lattice Design. *Pharmaceutical Sciences and Research*, 3(2), pp. 72-79.
- Satya Darmayani, et al. (2021). *BIOTEKNOLOGI 2 CETAK (1)-1*.
- Setyawati, R., & Zubaidah, S. (2021). Optimasi Konsentrasi Primer dan Suhu Annealing dalam Mendeteksi Gen Leptin pada Sapi Peranakan Ongole (PO) Menggunakan Polymerase Chain Reaction (PCR). In *JOURNAL OF LABORATORY ISSN* (Vol. 4, Issue 1). Online.
- Sezonov, G., Joseleau-Petit, D., & D'Ari, R. (2007). *Escherichia coli* physiology in Luria-Bertani broth. *Journal of Bacteriology*, 189(23), 8746–8749. <https://doi.org/10.1128/JB.01368-07>
- Shinde, S. A., Chavhan, S. A., Sapkal, S. B., & Shrikhande, V. N. (2018). *Recombinant DNA Technology and its Applications: A Review*. www.medipharmsai.com
- Sitepoe, M., 2001. *Produk Rekayasa Genetika*. Edisi 1 Cetakan 2 ed. Probolinggo: Grasindo.

- Sulaiman Khan, e. a., 2016. *Role of Recombinant DNA Technology to Improve Life*. s.l.:International Journal of Genomics .
- Suryaningtyas, I. T., 2017. *APLIKASI BIOTEKNOLOGI MOLEKULER DALAM BUDIDAYA PERAIRAN*. Laboratorium Budidaya Biota Laut, Pusat Penelitian Oseanografi, LIPI: Oseana.
- Singh, M., & Ma, X. (2010). *Plasmid DNA transformation in Escherichia Coli: effect of heat shock temperature, duration, and cold incubation of CaCl₂ treated cells Postmortem cell recovery View project postmortem cell recovery View project*. <http://www.ripublication.com/ijbb.htm>
- Siu S.S. Langden, A. B. W. W. K. (2017). TRANSFORMASI DAN KLONING PLASMID PJ804:77539 PADA E.coli TOP'10. *Jurnal Biologi*, Vol 6, 65–70.
- ULFAYANI MAYASARI. (2020). Mikrobiologi. *UNIVERSITAS ISLAM NEGERI SUMATERA UTARA* .
- Wulandari, S., Sholihatun Nisa, Y., Indarti, S., & Rr Rahmi Sri Sayekti, dan. (2021). STERILISASI PERALATAN DAN MEDIA KULTUR JARINGAN 1 1 2 2 1*. In *Agrinova: Journal of Agrotechnology Innovation* (Vol. 4, Issue 2). <https://jurnal.ugm.ac.id/Agrinova/>
- Widyawati, L., Mustariani, B. A. A. & Purmafitriah, E., 2017. Formulasi Sediaan Gel Hand Sanitizer Ekstrak Etanol Daun Sirsak (*Annona Muricata* Linn) Sebagai Antibakteri Terhadap *Staphylococcus aureus*. *Jurnal Farmasetis*, 6(2), pp. 47 - 57.
- Wira, D. W., 2022. *Polimorfisme CYP2D6 dan Pengaruhnya Terhadap Metabolisme Kodein*. Palembang : Universitas Sriwijaya .
- Yao, S., Hart, D. J., & An, Y. (2016a). Recent advances in universal TA cloning methods for use in function studies. In *Protein Engineering, Design and Selection* (Vol. 29, Issue 11, pp. 551–556). Oxford University Press. <https://doi.org/10.1093/protein/gzw047>
- Yao, S., Hart, D. J., & An, Y. (2016b). Recent advances in universal TA cloning methods for use in function studies. In *Protein Engineering, Design and Selection* (Vol. 29, Issue 11, pp. 551–556). Oxford University Press. <https://doi.org/10.1093/protein/gzw047>
- Yuenleni. (2019). *INDONESIAN JOURNAL OF LABORATORY LANGKAH-LANGKAH OPTIMASI PCR* (Vol. 1, Issue 3). Online.
- Yusriana, C. S., Budi, S., & Dewi, T. (2014). Uji Daya Hambat Infusa Daun Nangka (*Artocarpus heterophyllus*) Terhadap Pertumbuhan Bakteri *Staphylococcus aureus*. In *Jurnal Permata Indonesia* (Vol. 5, Issue 2).

Zanger, U. M. (2014a). Genetic variability of CYP2D6: Basic and clinical aspects. In *CYP2D6: Genetics, Pharmacology and Clinical Relevance* (pp. 28–41). Future Medicine Ltd. <https://doi.org/10.2217/FMEB2013.13.130>

Zanger, U. M. (2014b). Genetic variability of CYP2D6: Basic and clinical aspects. In *CYP2D6: Genetics, Pharmacology and Clinical Relevance* (pp. 28–41). Future Medicine Ltd. <https://doi.org/10.2217/FMEB2013.13.130>

Zhou, S.-F. (2009). *Polymorphism of Human Cytochrome P450 2D6 and Its Clinical Significance Part I*.