

DAFTAR PUSTAKA

- Adda CG, MacRaild CA, Reiling L, Wycherley K, Boyle MJ, Kienzle V. 2012. Antigenic Characterization of an Intrinsically Unstructured Protein, *Plasmodium falciparum* Merozoite Surface Protein 2. *Infect Immun.* 80(12): 4177-4185.
- Allison L. A., 2007. *Fundamental Molecular Biology*. Blackwell Publishing: UK.
- Arsin, A. A., 2012. *Malaria Di Indonesia Tinjauan Aspek Epidemiologi*. Masagena-Press: Makassar.
- Auerkari, E. I., Ichwan, S. J. A., 1998. PCR (Polymerase Chain Reaction): Teknik Dan Aplikasinya Di Bidng Kedokteran Gigi. *Jurnal Kedokteran Gigi Universitas Indonesia.* 5 (1) : 43-46.
- Bannister L. H., dan Sherman I. W., 2009. *Plasmodium*, In : *Encyclopedia Of Life Science*. John Willey & Sons, Ltd: Chichester.
- Bioneer, 2016. *AccuRapid™ Protein Expression Kit*. User Manual V2/2016-02-01.
- Brown T.A., 2010. *Gene Cloning and DNA Analysis An Introduction*. Willey-Backwell: UK.
- Bull P C., 1998. Parasite Antigens on The Infected Red Cell Surface are Targets for Naturally Acquired Immunity to Malaria. *Nature Med* 4 : 358-360.
- Gaffar, Shabarni., 2010. *Produksi Protein Rekombinan dalam Sistem Ekspresi Pichia pastoris*. Unpad Press : Bandung.
- Gardner M. J., Hall N., Fung. E., et al., 2002. Genome Sequence of The Human Malaria Parasite *Plasmodium falciparum*. *Nature.* 419 (6909): 498-511.
- Gill G. dan Beeching N., 2009. *Lecture Notes: Tropical Medicine*. Blackwell Publishing Ltd. UK.
- Goodman A. L, Epp C, Moss D, Holder A. A, Wilson J. M, Gao G. P. 2010. New Candidate Vaccines against Blood-Stage *Plasmodium falciparum* Malaria: Prime-Boost Immunization Regimens Incorporating Human and Simian Adenoviral Vectors and Poxviral Vectors Expressing an Optimized Antigen Based on Merozoite Surface Protein 1. *Infect Immun.* 78(11): 4601-4612.
- Handoyo D. dan Rudiretna A., 2001. Prinsip Umum Dan Pelaksanaan Polymerase Chain Reaction (PCR) (General Principles and Implementation of Polymerase Chain Reaction). *Unitas.* 9 (1) : 17-29.

- Harijanto, P.N., 2000. *Malaria Epidemiologi, Patogenesis, Manifestasi Klinis, dan Penanganan*. ECG: Jakarta.
- Harijanto, P.N., 2009. *Malaria Dari Molekuler Ke Klinis*. ECG: Jakarta.
- Hodgman, C. E dan Jewett M. C., 2012. Cell-Free Synthetic Biology: Thinking Outside the Cell. *Metab Eng.* 14 (3) : 261-269.
- Holder, A. A., 2009. The Carboxy-Terminus of Merozoite Surface Protein 1: Struktire, Specific Antibodies and Immunity to Malaria. *Parasitology*. 136 : 1445-1456.
- Howe, C. J., 2007. *Gene Cloning and Manipulation: Second Edition*. Cambridge University Press. UK.
- Invitrogen, 2010. *Champion™ pET SUMO Protein Expression System*. User Maanual; cat K300-01.
- Invitrogen, 2011. *PureLink® Quick Plasmid Miniprep Kits*. User Manual; cat K2100-01.
- Irawati N. 2011. Genetic Polymorphism of Merozoite Surface Protein-1 (MSP-1) block 2 Allelic Types in *Plasmodium falciparum* Field Isolates from Mountain and Coastal Area in West Sumatera, Indonesia. *Med J Indones*. 20: 11-14.
- Jongwutiwes S., Tanabe K., dan Kanbara H., 1993. Sequence Conservation In The C-terminal Part Of The Precursor To The Major *Merozoite Surface Protein* (MSP1) of *Plasmodium falciparum* From Field Isolates. *Mol. Biochem. Parasitol.* 59 (1) : 95-100.
- Joos C., Marie Louise V., Babacar M., et al., 2015. Antibodies to *Plasmodium falciparum* Merozoite Surface Protein-1 p19 Malaria Vaccine Candidate Induce Antibody-Dependent Respiratory Burst In Human Neutrophils. *Malaria Journal*. (14) 409.
- Kavoosi G., dan Ardestani S. K., 2012. Gel Electrophoresis of Protein – From Basic Science To Practical Approach, Gel Electrophoresis – Principles and Basic, Dr. Samed Magdeldin (ed). www.intechopen.com : 69-88.
- Kellerman R. D., dan Bope E. T., 2018. *Conn's Current Therapy 2018*. Elsevier, Inc. USA.
- Kemenkes RI., 2012. *Buku Saku Penatalaksanaan Kasus Malaria*. Jakarta.
- Kemenkes RI., 2016. *InfoDatin Malaria*. Jakarta.

- Kurien B. T., dan Scofield R. H., 2006. Western Blotting. *Methods* 38 : 283-293.
- Langhorne, J., 2005. *Immunology and Immunopathogenesis of Malaria*. Berlin, Springer: Jerman.
- Lu, Y., 2017. Cell-Free Synthetic Biology : Engineering In An Open World. *Synthetic and Systems Biotechnology*. 2 : 23-27.
- Mahmood T., dan Yang P. C., 2015. Western Blot : Technique, Theory, and Trouble Shooting. *North American Journal of Medical Science*. 4 (9) : 429-434.
- McPherson M. J, and Moller S. G., 2006. *PCR Second Edition*. Taylor & Francis Group: UK.
- Miller L. H., Baruch D. I., Marsh K., Doumbo O. K., 2002. The Pathogenic Basic of Malaria. *Nature*. 415 (6872) : 637-639.
- Mirahmadi H., Adel S., Shirzad F., Niloofar T., Habibollah T., Sayyed J. S. T., 2015. Cloning and Sequence Analysis of Recombinant *Plasmodium vivax* Merozoite Surface Protein 1 (PvMSP-1 42 kDa) In pTZ57R/T Vector. *Iran J Parasitol*. (10) 2 : 197-205.
- Murhandarwati E. H., Supargiyono., Asmara W., 2002. Aplification and Cloning of Block 2 of The Gene Encoding Merozoite Surface Protein-1 (MSP-1) of *Plasmodium falciparum* Isolated From Kokap Yogyakarta. *Berkala Ilmu Kedoteran*. (34) 2 : 69-75.
- Ndeta G. N., Dickson L. A., Winston A. A., 2016. Characterization Of The MSP-1 Protein In Field Samples Of *Plasmodium falciparum* And Its Homology To The *Plasmodium vivax* MSP-1 Protein. *Journal of Parasitology and Vector Biology*. 8 (3) : 27-38
- Nindela, Rini., 2015. *Merozoite Surface Protein-1 (MSP-1) dan Merozoite Surface Protein-2 (MSP-2) Plasmodium falciparum* Sebagai Kandidat Vaksin Malaria. *MKS*. 47 (1) : 67-73.
- Nurul A. A., Rapeah S., Norazmi M. N., 2010. *Plasmodium falciparum* 19 kDa of Merozoite Surface Protein-1 (MSP-1 19) Expressed In *Mycobacterium bovis* Bacille Calmette Guerin (BCG) Is Reactive With An Inhibitory But Not A Blocking Monoclonal Antibody. *Tropical Biomedicine*. 27 (1) : 60-67.
- Old R. W., dan Primrose S. B., 1989. *Prinsip-Prinsip Manipulasi Gen Pengantar Rekayasa Genetik*. Backwell Scientific Publication. UK.

- Pelczar, M.J. dan E.C.S. Chan., 1998. *Dasar-Dasar Mikrobiologi*. Diterjemahkan oleh R.S. Hadioetomo., T. Imas., S.S. Tjitrosomo., S.L. Angka. UI Press: Jakarta.
- Pothin E., Ferguson N. M., Drakeley C. J., Ghani A. Z., 2016. Estimating Malaria Transmission Intensity From *Plasmodium falciparum* Serological Data Using Antibody Density Model. *Malaria Journal*. 15 (79).
- Polley S. D, Tetteh K. K. A, Cavanagh D. R, Pearce R. J, Lloyd J. M, Bojang K. A. 2003. Repeat Sequence in Block 2 of *Plasmodium falciparum* Merozoite Surface Protein-1 are Targets of Antibodies Associated with Protection from Malaria. *Infect Immun*. 71(4): 1833-1842.
- Primrose S. B., and Twyman R. M., 2006. *Principles of Gene Manipulation and Genomics : Seventh Edition*. Blackwell Publishing. UK.
- Ravanshad M., Sabahi F., Mahboudi F., 2007. Quantification Analysis of Dot Blot Assays for Uman Immunodeficiency Virus Type 1 and 2 Antibodies. *Iranian Journal od Basic Medical Sciences*. 10 (2) : 132-138.
- Roy S., dan Kumar V., 2012. A Practical Approach on SDS PAGE for Separation of Protein. *International Journal of Science and Research*. 3 (8) : 955-960.
- Rumiyati dan Sudjadi., 1999. Penyisipan Gena Asi Penyandi Asilase Penisilin Ke Dalam Vektor Plasmid pAS328. *Majalah Farmasi Indonesia*. 10 (1): 22-30.
- Sambrook, J., E. F. Fritsch., T. Manniatis. 1998., *Molecular Cloning: A Laboratory Manual* 2nd ed. Cold Spring Harbour Laboratory Press. New York.
- Sudjadi, 2008. *Bioteknologi Kesehatan*. Kanisius: Yogyakarta.
- Supargiyono., Michael T. B., Mahardika A. H., et al., 2013. Seasonal Changes In The Antibody Responses Agains *Plasmodium falciparum* Merozoite Surface Antigens In Areas Of Differing Malaria Endemicity In Indonesia. *Malaria Journal* (12) 444 : 1-11.
- Susanto, A. H., 2011. *Genetika*. Graha Ilmu: Yogyakarta.
- Sutton P. L, Clark E. H, Silva C, Branch O. H. 2010. The *Plasmodium falciparum* Merozoite Surface Protein-1 19 KDA Antibody Response in the Peruvian Amazon Predominantly targets the Non-Allele Specific, Shared Sites of This Antigen. *Malar J*. 9: (3).

- Sylla K., Tine R. C. K., Ndlaye M., et al., 2015. Sero-epidemiological Evolution of *Plasmodium falciparum* Malaria In Senegal. *Malaria Journal*. 14 (275).
- Syukur S., dan Purwati E., 2013. *Bioteknologi Probiotik Untuk Kesehatan Masyarakat*. Penerbit Andi: Yogyakarta.
- Takala S. L., Smith D. L., Thera M. A., et al., (2007). Short Report: Rare *Plasmodium falciparum* merozoite surface protein 1 19-KDA (MSP-119) haplotypes identified in Mali using High-throughput genotyping methods. *Am. J. Trop. Med. Hyg.* 76 : 855-859.
- Taylor H. M., Kyes S. A., Newbold C. I., 2000. Var Gene Diversity in *Plasmodium falciparum* is Generated by Frequent Recombination Event. *Mol Biochem Parasitol*. 110 : 391-397.
- Unicef, 2009. *Lembar Fakta Malaria*. Jakarta Indonesia.
- Vaillant A. A. J., McFarlane-Anderson N., Akpaka P. E., et al., 2013. Use of Dot Blot Analysis in the Separation of Anti-HIV Antibodies in Animals. *J Chromat Separation Techniq*. 4 (5).
- Viljoen G. J., Nel L. H., Crowther J. R., 2005. *Molecular Diagnostic PCR Handbook*. Springer. Netherlands.
- Wahyunie S., Nurhayana S., Daud D., Mansyur A., 2015. Malaria Kongenital. *Indonesian Journal of Clinical Pathology and Medical Laboratory*. 21 (2) : 202-207.
- WHO, 2010. *Basic Malaria Microscopy Part 1. Learner's Guide*. Geneva Switzerland : WHO Press.
- WHO, 2017. *World Malaria Report 2017*. Geneva Switzerland : WHO Press.
- Woehlbier U., Epp C., Kauth C. W., et. al., 2006. Analysis of Antibodies Directed against *Merozoite Surface Protein 1* of the Human Malaria Parasite *Plasmodium falciparum*. *Infection and Immunity*. 74 (2) : 1313-1322.
- Wong, D. W. S. 1997. *The ABC Of Gene Cloning*. International Thomson Publishing: New York.
- Yuwono, Triwibowo., 2005. *Biologi Molekuler*. Erlangga: Jakarta.