

DAFTAR PUSTAKA

- Abbott, N.J., 1992, Comparative Physiology of The Blood-Brain Barrier, In: Bradbury, M.W.B. (Ed.), Physiology and Pharmacology of the Blood-Brain Barrier, *Springer*, 371-396.
- Adiningsih, P., 2013, Efek Fraksi Etil Asetat Batang Brotowali Terhadap Peningkatan Memori dan Fungsi Kognitif Pada Mencit Galur Balb/c Berdasarkan Passive Avoidance Test, *Skripsi*, Program Sarjana fakultas Farmasi Universitas Gadjah Mada, Yogyakarta.
- American Psychiatric Association, 1994, *Diagnostic and Stastical Manual of Mental Disorders (DSM-IV)*, Washington, DC.
- Anthony, J.P., Sexton, T.J., Neumaier, J.F., 2000, Antidepressant-Induced Regulation 5-HT_{1B} mRNA in Rat Dorsal Raphe Nucleus Reverse Rapidly After Drug Discontinuaation, *Journal of Neuroscience Research*, **61**, 82-87.
- Bhoi, D., 2012, Dietary Bioactive Compounds as Histone Deacetylases (HDAs) Inhibitors In Health and Disease, *Nutrients*, **6**, 4273-4301.
- Blanco, A.M., Valles, S.L., Pascual, M., Guerri, C., 2005, Involvement of TLR4/type I IL-1 Receptor Signaling in The Induction of Inflammatory Mediators and Cell Death Induced by Ethanol in Cultural Astocytes, *Journal of Immunology*, **175**, 6893-6899.
- Borelli,E., Nestler, EJ., Allis, CD., Corsi, PS., 2008, Decoding The Epigenetic Language of Neuronal Plasticity, *Neuron*, **60** (6), 961-974
- Brailowsky, S., & Garcia, O., 1999, Ethanol, GABA, and Epilepsy, *Archives of Medical Research*, **30**, 3-9.
- Brown, R.E., Corey, S.C., & Moore, A.K., 1999, Differences in Measures of Exploration and Fear in MHC-Congenic C57BL/6J and B6-H-2K Mice, *Behavior Genetics*, **26**, 263-271.
- Butterfield, D.A., Howard, B., Yatin, S., Koppal, T., Drake, J., Hensley, K., Aksenay, M., Aksenova, M., Subramaniam, R., Varadarajan, S., Harris-White, M.E., Pedigo, N. W & Carney, J.M., 1999, Elevated Oxidative Stress in Models of Normal Barain Aging and Alzheimer's Disease, *Life Science*, **65** (18-19), 1883-1892.
- Carrey, N., McFadyen, M.P., & Brown, R.E., 2000, Effects of Chronic Methylphenidate Administration on The Locomotor and Exploratory Behavior of Prepubertal Mice, *Journal of Child Adolescent Psychopharmacology*, **10**, 277-286.

- Casadesus, G., Shukkit-Hale, B., Stellwagen, H.M., Zhu, X., Lee, H.G., Smith, M.A., Joseph, J.A., 2004, Modulation of hippocampal plasticity and cognitive behavior by short-term blueberry supplementation in aged rat, *Nutritional Neuroscience*, **7**, 309-316.
- Chabib, L., Martien, R., dan Ismail, H., 2012, Formulation of Nanocurcumin Using Low Viscosity Chitosan Polymer and Its Cellular Uptake Study Into T47D Cells, *Indonesian Journal of Pharmacy*, **23**(1), 27-35.
- Cheng, K.K., Yeung, C.F., Ho, S.W., Chow, S.F., Chow, A.H.L., dan Baum, L., 2013, Highly Stabilized Curcumin Nanoparticles Tested in an *In Vitro* Blood-Brain Barrier Model and in Alzheimer's Disease Tg2567 Mice, *The AAPS Journal*, **15**(2), 324-336.
- Cunha, C., Brambilla, R., & Thomas, K. L., 2010, A simple role for BDNF in learning and memory, *Frontiers in molecular neuroscience*, **3**(1), 1-12.
- Da'i, M., 1998, Pengaruh Gugus β -diketon terhadap Daya Reduksi Kurkumin dan Turunannya pada Ion Ferri, *Skripsi*, Fakultas Farmasi, Universtas Gadjah Mada, Yogyakarta.
- De Rujiter, A.J.M, Van Gennip, A.H., Caron, H.N., Kemp, S., & Van Kuilenburg, A.B.P., 2003, Histon Deacetylases (HDAs): Characterization of the HDA family, *Biochemical Journal*, **370**, 737-749.
- Deng, W., Aimone, J.B., Gage, F.H., 2010, New Neurons and New Memories: How Does Adult Hippocampal Neurogenesis Affect Learning and Memory, *National Reviews Neuroscience*, **11**, 339-50.
- Doak, S.H., Zaiir, Z.M., 2012, *Real-Time Reverse Transcription Polymerase Chain Reaction: Technical Consideration for Gene Expression Analysis*, in: *Genetic Toxicology: Principle and Methods chapter 27*, 251-270.
- Fakuchi, M., Nii, T., Ishinaru, N., Minamino, A., Hara, D., Takasaki, I., Tabuchi, A., & Tsuda, M., 2009, Valproic Acid Induces Up or Down Regulation of Gene Expression Responsible for The Neuronal Excitation and Inhibition in Rat Cortical Neurons Through It's Epigenetic Actions, *Neuroscience Research*, **65**(1), 35-43.
- Farrel Jr., R.E., 2010, *Chapter 18- RT-PCR: A Science and an Art Form*, in: *RNA Methodologies*, Fourth (atau 4th)Ed., 385-448, Academic press, Sandiego.
- Finnin, M.S., Donigian, J.R., Cohen, A., Richon, V.M., Rifkind, R.A., Marks, P.A., Breslow, R., Pavletich, N.P., 1999, Structures of a histone deacetylase homologue bound to the TSA and SAHA inhibitors, *Nature*, **401**, 188-193.

- Fischer, A., Sananbenesi, F., Mungenast, A., Tsai, L., 2010, Targeting the correct HDACs to treat cognitive disorders, *Trends in Pharmacological Sciences*, **31** (12), 605–617.
- Frautschy, S.A. & Hu, W., 2001, Phenolic Anti Inflammatory Antioxidant Reversal of Induced Cognitive Deficits and Neuropathology, *Neurobiology of Aging*, **22**, 993–1005.
- Freeman, W.M., Walker S.J., Vrana, K.E., 1999, Quantitative RT-PCR: pitfalls and potential, *Biotechniques*, **26**, 112-122, 124-125.
- Gasso, P., Rodriguez, N., Monteagudo, A., Boloc, D., Plana, M.T., Lafuente, A., Lazaro, L., Arnaiz, J.A., Mas, S., 2017, Epigenetic and Genetic Variants in the Htr1B gene and Clinical Improvement in Children and Adolescent Treated with Fluoxetine, *Progress in Neuro-Psychopharmacology & Biological Psychiatry*, **75**, 28-34.
- Govindarajan, N., Roberto, C., Jonas, W., Andre, F., 2011, Sodium Butyrate Improves Memory Function in an Alzheimer's Disease Mouse Model When Administreted at an Advanced Stage of Disease, *Journal Alzheimer's Disease*, **26** (1), 187-197.
- Gruart, A., Munoz, M.D. and Delgado-Garcia, J.M., 2006, Involvement of the CA3-CA1 Synapse in the Acquisition of Associative Learning in Behaving Mice, *Journal Neuroscience*, **26** (4), 1077-1087.
- Guan, JS., Haggarty, SJ., Giacometti, E., Dannenberg, JH., Joseph, Gao, Nieland, Wang, X., HDAC2 Negatively regulates memory formation and synaptic plasticity, *Nature*, **459** (7243), 55-60.
- Hakim, A.R., Nugroho, A.E., dan Hakim, L., 2006, Profil Farmakokinetika Pentagamavunon-0 setelah Pemberian Kalium Pentagamavunonat-0 secara Oral pada Tikus, *Majalah Farmasi Indonesia*, **17** (4), 204 – 211, Universitas Gadjah Mada.
- Harper, L.K., & Matsumoto, I., 2005, Ethanol and Brain Damage, *Current Opinion in Pharmacology*, **5**, 73-78.
- Hsieh, J. & Gage, F.H., 2004, Epigenetic Control of Neural Stem Cell Fate, *Current Opinion in Genetics and Development*, **14** (5), 461-469.
- Jarrard, L.E., 1983, Selective hippocampal lesions and behavior: effects of kainic acid lesions on performance of place and cue tasks, *Behavioral Neuroscience*, **97**, 873-889.
- Juliandi, B., Abematsu, M., & Nakashima, K., 2010, Epigenetic regulation in neural stem cell differentiation, *Development, Growth and Differentiation*, **52** (6), 493–504.

- Kaidanovich-Beilin, O., Lipina, T.V., Vakubradovic, I., Roder, J., Woodgett, J.R. Assessment of Social Interaction Behaviors, 2011, *Jove Visual Experimental*, **48**, 2473-3791.
- Kang, J., Chen, J., Shi, Y., Jia, J., Zhang, Y., 2005, Curcumin-Induced Histone Hypoacetylation: The role of reactive oxygen Species, *Biochemical Pharmacology*, **69**, 1205-1213.
- Kathleen, R., Bailey and Jacqueline, N., Crawley J., 2009, Anxiety Related Behavior in Mice, *Pharmacology, Biochemistry, and Behavior*, **13** (2), 167–170.
- Kyza, E., Pandey, S.C., 2015, Molecular Mechanisms of Synaptic Remodeling in Alcoholism, *Neuroscience Letters*, **601**, 11-19.
- Lappalainen, J., Long, J.C., Eggert, M., Ozaki, N., Robin, R.W., Brown, G.L., Naukkarinen, H., Virkkunen, M., Linnoila, M., Goldman, D., 1998, Linkage Of Antisocial Alcoholism To The Serotonin 5-HT1B Receptor Gene In 2 Populations, *Archives Of General Psychiatry*, **55**, 989–994.
- Legastelois, R., Botia, B., Naaassila, M., 2013, Blockade of Ethanol-Induced Behavioral Sensitization by Sodium Butyrate: Descriptive Analysis of Gene Regulations in the Striatum, *Alcoholism Clinical and Experimental Research*, **37**, 1143-1151.
- Licciardi, P. K., 2012, Influence of Natural and Synthetic Histone Deacetylase Inhibitors on Chromatin, *Antioxidants & Redox Signaling*, 340-354.
- Liu, H.L., Chen, Y., Cui, G.H., Zhou, J.F., 2005, Curcumin Potent Anti-tumor Reagent, is a Novel Histone Deacetylase Inhibitor Regulating B-NHL Cell Line Raji Proliferation, *Acta Pharmacologica Sinica*, **26**, 603–609.
- Lowe, T., Sharefkin, J., Yang, S.Q., Dieffenbach, C.W., 1990, A Computer Program For Selection Of Oligonucleotide Primers For Polymerase Chain Reactions, *Nucleic Acid Research*, **18** (7), 1757-1761.
- Lu, W., Zhang Y., Tan Y. Z., Hu K. L., Jiang X. G., Fu S. K., 2005, Cationic Albumin-Conjugated Pegylated Nanoparticles As Novel Drug Carrier For Brain Delivery, *Journal of controlled release*, **107**: 428-448
- Mai, A., Massa, S., Rotili, D., Pezzi, R., Bottoni, P., Scatena, R., Meraner, J., Brosc, G., 2005, Exploring the connection unit in the HDAC inhibitor pharmacophore model: Novel uracil-based hydroxamates, *Bioorganic & medicinal Chemistry Letters*, **15**, 4656-4661.

- Majid, A.I., 2016, Pengaruh Pemberian Nanoemulsi Kurkumin dan Nanoemulsi Pentagamvunon-0 terhadap Perubahan Perilaku Interaksi Sosial Serta Fungsi Memori dan Kognitif, *Skripsi*, Fakultas Farmasi Universitas Gadjah Mada, Yogyakarta.
- Mancuso, C., Siciliano, R., Barone, E., 2011, Curcumin and Alzheimer Disease; ThisMarriage is Not To Be Performed, *Journal of Biology Chemistry*, **285**, 28472-28480.
- Marbawati, D., dan Sarjiman, 2015, Konsentrasi Aman Kurkumin dan PGV-0 terhadap Sel Vero Berdasarkan Hasil Uji Sitotoksik, *Jurnal Kefarmasian Indonesia*, **5**, 67-73.
- Marks, P.A., 2010, Histone Deacetylase Inhibitors: A Chemical Genetics Approach To Understanding Cellular Functions, *Biochemica et Biophysica Acta*, **1799**, 717-725.
- Martien, R., Adhyatmika, Irianto, I.D.K., Farida, V., Sari, D.P., 2012, Perkembangan Teknologi Nanopartikel Sebagai Sistem Penghantaran Obat, *Majalah Farmaseutik*, **8** (1), 133- 140.
- Minichiello, L., Korte, M., Wolfer, D., Kuhn, R., Unsicker, K., Cestari, V., Arnaud, Lipp, Bonhoeffer, T., Klein, R., 1999, Essential Role for TrkB Receptors in Hippocampus-Mediated Learning, *Cell Press*, **24**, 401-414.
- Morret, C. & Briley, M., 2000, The possible role of 5-HT (1B/D) receptors in psychiatric disorders and their potential as a target for therapy, *European Journal of Pharmacology*, **404** (1-2), 1-12.
- Moul, C., Stone, C.D., Brennan, J., Hawes, D.J., Dadds, 2015, Serotonin 1B Receptor Gene (HTR1B) Methylation As A Risk Factor For Callous-Unemotional Traits In Antisocial Boys, *PloS ONE*, **10** (5), 1-15.
- Moy, S.S., Nadler, J.J., Perez,A., Barbaro, R.P., Johns, J.M., Magnuson, T.R., Piven, J., Crawley, J.N., 2004, Sociability and Preference for Social Novelty in Five Inbred Strains: An Approach to Asses Autistic – like Behavior in Mice, *Genes Brain Behavior*, **3**, 287 – 302.
- Muladno, 2010, *Teknologi Rekayasa Genetika*, Edisi II, 63-66, IPB Press, Bogor.
- Murer, M. G., Yan, Q., and RaismanVozari, R, 2001, Brain-derived neurotrophic factor in the control human brain, and in Alzheimer’s disease and Parkinson’s disease, *Progress in Neurobiology*, **63**, 71–124.
- Narayan, P., and Dragunow, M., Pharmacology of epigenetics in brain disorders, *British Journal of Pharmacology*, **159**(2), 285-303.

- Nurrochmad, A., 1997, Penghambatan Biosintesis Prostaglandin melalui Jalur Siklooksigenase oleh Siklovalon dan Tiga Senyawa Analognya, *Skripsi*, Fakultas Farmasi, Universtas Gadjah Mada, Yogyakarta.
- Nurrochmad, A., 2004, Pandangan Baru Kurkumin dan Aktivitasnya sebagai Antikanker, *Biofarmasi*, **2** (2), 75-80.
- O’Leary, O.F., dan Cryan, J.F., 2010, dalam Müller, C.P., dan Jacobs, B.L. (eds), *Handbook of the Behavioral Neurobiology of Serotonin*, **21**, 749, Academic Press, London.
- Onksen, J.L., 2011, Role Of Hippocampal Neurogenesis In The Etiology And Treatment Of Mood & Anxiety Disorders, *Publicly accessible Penn Dissertations*, University of Pennsylvania Scholarly Commons.
- Pandey, SC., Ugale, R., Zhang, H., Prakash,A., 2008, Brain Chromatin Remodeling: A Novel Mechanism of Alcoholism, *The Journal of Neuroscience*, **28** (14), 3729-3737.
- Porter C.J., Kaukonen A.M., Taillardat-Bartschinger A., Boyd B.J., O’Cnorn J.M., Edwards G.D., dan Charman W.N., 2004, Use of in Vitro Lipid Digestion Data to Explain the in Vivo Performance of Triglyceride-Based Oral Lipid Formulations of Poorly Water-Soluble Drugs: Studies with Halofantrine, *Journal of Pharmaceutical Science*, **93**, 1110-1121.
- Rajendran, P. H., 2011, Dietary phytochemicals, HDAC inhibition, and DNA damage/repair defects in cancer cells, *Clinical Epigenetics*, **3** (4), 1-23.
- Rianto, R.K., 1998, Daya Tangkap Radikal Superoksid dan Senyawa Siklovalon dan Derivat Lingkar Lima dan Rantai Lurus dengan Variasi Gugus Metoksi pada Cincin Aromatis, *Skripsi*, Fakultas Farmasi, Universtas Gadjah Mada, Yogyakarta.
- Rowe R.C., Sheskey P.J., dan Owen S.C., 2009, *Handbook of Pharmaceutic Excipients*, 6th Edition, Pharmaceutical Press and American Pharmacist Association, London.
- Sakharkar, AJ., Zhang, H., Tang, L., Baxstrom, K., Shi, G., Moonat, S., Pandey, SC., 2014, Effects of Histon Deacetylase Inhibitors on Amygdaloid Histon Acetylation and Neuropeptide Y Expression: A role in Anxiety-like and Alcohol-drinking Behaviours, *International Journal of Neuropsychopharmacol*, **17** (8), 1207-1220.
- Saladin, K.S., 2006, *Anatomy and Physiology: The Unity of Form and Function*, 4th, 443-558, McGraw-Hill, New York.

- Sardjiman, 1993, Sintesa 2,6-Bis (3,5-Dimetil-4-hidroksi Benzilidin) Sikloheksanon, 2,5-Bis (3,5-Dimetil-4-hidroksi Benzilidin) Sikopentanon & Pentadien-on dan Daya Antioksidannya, *Laporan Penelitian*, **10** (5), 373-385, Universtas Gadjah Mada, Yogyakarta.
- Sardjiman, 2000, Synthesis of Some New Series of Curcumin Analogues, Anti-oxidative, Anti-inflammatory, antibacterial activities and qualitative-structure Activity relationship, *Dissertation*, Gadjah Mada University, Yogyakarta.
- Sari, M.I., 2007, Pengaturan Ekspresi Gen, *Makalah*, Fakultas Kedokteran Universitas Sumatera Utara.
- Schroeder J, S. H., 2013, Spinal alignment in low back pain patients and age-related side effects: a multivariate cross-sectional analysis of video rasterstereography back shape reconstruction data, *Europe Spine Journal*, **85**.
- Seo, T.B., Cho, H.S., Shin, M.S., Kim, C.J., Ji, E.S. & Baek, S.S., 2013, Treadmill Exercise Improves Behavioral Outcomes and Spatial learning Memory Through Upregulation of Reelin Signaling Pathway in Autistic Rats, *Journal of Exercise Rehabilitation*, **9** (2), 220-229.
- Sethi, P., Jyoti, A., Hussain, E., Sharma, D., 2009, Curcumin Attenuates Alumunium-induced Functional Neurotoxicity in Rats, *Pharmacological Biochemistry Behaviour*, **93**, 31-39.
- Setyowati, L.A., Analisis Pengaruh Pentagamavunon-0 Terhadap aktivitas Enzim HDA2 Secara In vitro, *Skripsi*, Fakultas Farmasi Universtas Gadjah Mada, Yogyakarta.
- Suganda, R.R., 2011, Regulasi Ekspresi Gen, *Makalah*, *citated from* Dorland, W.A., 2002, *Kamus Kedokteran Dorland*, Edisi 29, Buku Kedokteran EGC, Jakarta.
- Tarantino, L. and Bucan, M., 2000, Dissection of behavior and psychiatric disorders using the mouse as a model, *Human Molecular Genetics.*, **9**(6), 953-965.
- Tim Molnas Fakultas Farmasi UGM, 2001, Buku III, *Laporan Penelitian Bidang Farmakologi Proyek Molnas*, Fakultas Farmasi Universtas Gadjah Mada, Yogyakarta.
- Vohora, D., Pal, S.N., & Pillai, K.K., 2000, Effect of Locomotor Activity on The Passive Avoidance Test for Evaluation of Cognitive function, *Indian Journal of Pharmacology*, **32**, 242-245.
- Volmar, H., and Claude, Wahlestedt, C., Histon deacetylases (HDACs) and brain function, *Neuroepigenetics*, **1**, 20-27.
- Wagner, J.G., Gerrard, E.S., dan Kaiser, D.G., 1996, The Effect of The Dosage Form on Serum Levels of Indoxole, *Clinical Pharmacology and Therapeutics*, **7**, 610-619.

- Wang, J.Y., 2000, Comparison Between Acute Exposure to Ethanol and Acetaldehyde on Neurotoxicity, Nitric Oxide Production and NMDA Induced Excitotoxicity in Pyramidal Cultures of Cortical Neurons, *Chinese Journal of Psychology*, 43 (3), 131-138.
- You, C., Zhang, H., Sakharkar, A.J., Teppen, T., Pandey, S.C., 2014, Reversal of Deficits in Dendritic Spines, BDNF, and Arc expression in the amygdala During Alcohol Dependence by HDAC inhibitor Treatment, *International Journal of Neuropsychopharmacol*, 17 (2), 313-322.
- Yuniarti, N., Nurrochmad, A.N., 2016, Elucidasi Mekanisme Molekular Kurkumin dan Dietary Compounds Lain sebagai Brain Disorder Treatment Agents Baru melalui Uji Aktivitas In silico, In vitro, dan In vivo pada Target Enzim Histon Deasetilase, *Laporan Akhir Penelitian Hibah Kompetensi Tahun ke-2*, Ristek Dikti.
- Yuniarti, N., Nurrochmad, A.N., Istyastono, E.P., 2017, Elucidasi Mekanisme Molekular Kurkumin dan Dietary Compounds Lain sebagai Brain Disorder Treatment Agents Baru melalui Uji Aktivitas In silico, In vitro, dan In vivo pada Target Enzim Histon Deasetilase, *Laporan Akhir Penelitian Hibah Kompetensi Tahun ke-3*, Ristek Dikti.
- Zakhari, S., 2006, Overview: How is Alcohol Metabolized by Body?, *Alcohol Research Health*, 29 (4), 245-254.
- Zeng, Y., Tan, M., Kohyama, J., Sneddon, M., Watson, J.B., Sun, Y.E., Xie, C., 2011, Epigenetic Enhancement of BDNF Signaling Rescues Synaptic Plasticity in Aging, *The Journal of Neuroscience*, 31 (49), 17800-17810.
- Zhao, T., 2015, Self-nanoemulsifying Drug Delivery System (SNEDDS) for The Oral Delivery of Lipophilic Drugs, *Thesis*, University of Trento, Trento.
- Zhuang, X., Gross, C., Santarelli, L., Valerie, C., 1999, Altered Emotional States in Knockout Mice Lacking 5-HT1A or 5-HT1B Receptors, *Elsevier Science Neuropsychopharmacology*, 21 (25), 52-60.