

DAFTAR PUSTAKA

- Abdel-Naser, M. B., Abdallah, M., Almeida, H. L., dan Wollina, U., 2015, Human Skin Cell Culture and Its Impact on Dermatology, *Egyptian Dermatology Online Journal*, **1**(2), 1.
- Albert, 2002, *Fibroblast and Their Transformation: The Connective-Tissue Cell Family*, 4th edition, Molecular Biology of the Cell.
- Ames, B. N., Shigenaga, M. K. dan Hagen, T. M., 1993, Oxidants, Antioxidants, and the Degenerative Diseases of Aging, *Processing of the National Academy of Sciences of the United of America*, **90**, 7915–7922.
- Bahuguna, A., Khan, I., Bajpai, V. K. dan Kang, S. C., 2017, MTT Assay to Evaluate the Cytotoxic Potential of a Drug, *Bangladesh Journal Pharmacol*, **12**, 115–118.
- Balupillai, A., Prasad, R. N., Ramasamy, K., Muthusamy, G., Shanmugham, M., Govindasamy, K., dan Gunaseelan, S., 2015, Caffeic Acid Inhibits UVB-induced Inflammation and Photocarcinogenesis Through Activation of Peroxisome Proliferator-activated Receptor- α in Mouse Skin, *Photochemistry and Photobiology*, **91**, 1458-1468.
- Biehl, J. K. dan Russel, B., 2014, Introduction to Stem Cell Therapy, *National Institute of Health Public Acces*.
- Burry, R. W., 2011, Controls for Immunocytochemistry : An Update, *Journal of Histochemistry*, **59**(1), 6-12.
- Burton, E. R. dan Libutti, S. K., 2009, Targeting TNF- α for Cancer Therapy, *Journal of Biology*, **8**, 85.
- Chimote, V. P., 2013, Callus Induction and Plantlet Regeneration in Tomato (*Solanum Lycopersicum* L.), *Cell and Tissue Research*, **13**(2), 3765–3768.
- Choi, J. W., Lee, J. dan Park, Y. Il, 2017, Biomedicine & Pharmacotherapy 7, 8-Dihydroxy Flavone Attenuates TNF- α -Induced Skin Aging in Hs68 Human Dermal Fibroblast Cells via Down-regulation of the MAPKs / Akt Signaling Pathways, *Biomedicine & Pharmacotherapy*, Elsevier, **95**, 1580–1587.
- Dan, B. Z., Wei, L. F. dan Gao, X. C. J., 2008, *Baicalin Protects Human Fibroblasts Against Ultraviolet B-Induced Cyclobutane Pyrimidine Dimers Formation*, 331–334.
- Desvoyes, B., Mendoza, A., Iñaki Ruiz-Trillo, I., dan Gutierrez, C., 2014, Novel Roles of Plant Retinoblastoma-Related (RBR) Protein in Cell Proliferation

and Asymmetric Cell Division, *J Exp Bot.*

Dewi, D. A., 2018, Uji Aktivitas Penghambatan Kematian Ekstrak Air dan etanol Sel Punca Tanaman Tomat (*Solanum Lycopersicum* L.) terhadap Human Dermal Fibroblast Adult (HDFa) Cell Line yang Diinduksi Hidrogen Peroksida (H₂O₂), *Skripsi*, Fakultas Farmasi, Universitas Gadjah Mada, Yogyakarta.

Dimitrios, B., 2006, Sources of Natural Phenolic Antioxidants, *Food Science and Technology*, **17**, 505–512.

Freshner, R., I., Stacey, G. N., dan Auerbach, J. M., 2007, Culture of Human Stem Cells, *Congress Catalog*, United States of America.

Gwgotek, A., RybaBtowska-KawaBko, P., dan Skrzydlewska, E., 2017, Rutin as a Mediator of Lipid Metabolism and Cellular Signaling Pathways Interactions in Fibroblasts Altered by UVA and UVB Radiation, *Hindawi Publishing Corporation Oxidative Medicine and Cellular Longevity*.

Hana, C., A., 2016, Analisis Kandungan Senyawa Dominan dan Protein dalam Sel Punca (*Stem Cells*) Tanaman Tomat (*Solanum lycopersicum* L.) serta Uji Aktivitas Antioksidan, *Skripsi*, Fakultas Farmasi, Universitas Gadjah Mada, Yogyakarta.

Heidstra, R. dan Sabatini, S., 2014, Plant and Animal Stem Cells: Similar yet Different, *Nature Reviews Molecular Cell Biology*, **Vol. 15**.

Ikeuchi, M., Sugimoto, K. dan Iwase, A., 2018, *Plant Callus: Mechanisms of Induction and Repression Plant Callus: Mechanisms of Induction and Repression*, **25(9)**, 3159–3173.

Izykowska, I., Cegielski, M., Gebarowska, E., Podhorska-Okolow, M., Piotrowska, A., Zabel, M., dan Dziel, P., 2009, Effect of Melatonin on Human Keratinocytes and Fibroblast Subjected to UVA and UVB Radiation In Vitro, *In Vivo*, **23**, 739-746.

Jung, H., Shin, J., Park, S., Kim, N., Kwak, W. dan Choi, B., 2014, Pinus Densiflora Extract Protects Human Skin Fibroblasts Against UVB-Induced Photoaging by Inhibiting The Expression of MMPs and Increasing Type I Procollagen Expression, *Toxicology Reports*, **1**, 658–666.

Kammeyer, A. dan Luiten, R. M., 2015, Oxidation Events and Skin Aging, *Ageing Research Reviews*, Elsevier, **21**, 16–29.

Kanagalakshmi, A, Agilan, B., Mohana, S., Ananthkrishnan, D., Velmurugan, D., Karthikeyan, R., Ganesan, M., Srithar, G., dan Rajendra, P. N., 2014, Ferulic acid modulates ultraviolet-B radiation mediated inflammatory

signaling in human dermal fibroblasts, *Journal of Research in Biology*, **4**(8), 1505-1515.

Keira, S. M., Ferreira, L. M., Gagnani, A. dan Duarte, S., 2004, Experimental Model for Fibroblast Culture 1, *Acta Cir Bras*, **19**, 11–16.

Khoury, B. E., Andre, C., Pontvert-delucq, S., Drenou, B., Baillou, C., Guigon, M., Najman, A. dan Lemoine, F. M., 2018, Tumor Necrosis Factor, *Blood Journal*, **84**(8), 2506–2514.

Kim, M., dan Park, H. J., 2016, Molecular Mechanisms of Skin Aging and Rejuvenation, *Intech Open*, Chapter 4.

Kouba, D. J., Nakano, H., Nishiyama, T., Kang, J., Uitto, J. dan Mauviel, A., 2001, *Tumor Necrosis Factor- α Induces Distinctive NF- $\kappa\beta$ Signaling within Human Dermal Fibroblasts*, **276**(9), 6214–6224.

Kurniawati, Y., Adi, S., Achadiyani, Suwarsa, O., Erlangga, D., dan Putri, T., 2015, Kultur Primer Fibroblas: Penelitian Pendahuluan, *Artikel Penelitian*, **38**(1).

Kuruvilla, L. dan Kartha, C. C., 2009, Treatment with TNF- or Bacterial Lipopolysaccharide Attenuates Endocardial Endothelial Cell-Mediated Stimulation of Cardiac Fibroblasts, *Journal of Biomedical Science*, **16**(1), 1–7.

Lara, J., Sherratt, M. J., dan Ress, M., 2016, Aging dan Anti-aging, *Maturitas*, **93**, 1–3.

Latonen, L., Taya, Y. dan Laiho, M., 2001, UV-Radiation Induces Dose-Dependent Regulation of P53 Response and Modulates p53-HDM2 Interaction in Human \otimes Broblasts, *Nature Publishing Group*, **20**, 6784–6793.

Leung, L., dan Cahill, C., M., 2010, TNF- α and Neuropathic Pain - a Review, *Journal Neuroinflammation*, **7**(27), 1–11.

Martine, C., Larondelle, Y. dan Evers, D., 2010, *Dietary Antioxidants and Oxidative Stress from a Human and Plant Perspective : A Review*, **2**, 2–12.

Martinez, R. M., Pinho-Ribeiro, F. A., Steffen, V. S., Silva, T. C. C., Caviglione, C. V., Bottura, C., Fonseca, M. J. V., Fabiana, T. M. C. V., Vignoli, J. A., Baracat, M. M., Georgetti, S. R., Verri, W. A. Jr.; Casagrande, R., 2016, Topical Formulation Containing Naringenin: Efficacy against Ultraviolet B Irradiation-Induced Skin Inflammation and Oxidative Stress in Mice, *PLoS One*, **11**(1).

Masson-meyers, D. S., Bumah, V. V dan Enwemeka, C. S., 2016, A Comparison of Four Methods for Determining Viability in Human Dermal Fibroblasts

Irradiated with Blue Light, *Journal of Pharmacological and Toxicological Methods*, Elsevier Inc., **79**, 15–22.

Meerlo, J. Van, Kaspers, G. J. L., dan Cloos, J., 2011, Cell Sensitivity Assays : The MTT Assay, *Cancer Cell Culture and Protocole*, Second Edition, Method in Molecular Biology, 731.

Mesa-Arango, A. C., Flórez-Muñoz, S. V., dan Sanclemente, G., 2017, Mechanisms of skin aging, *IATREIA*, **30**(2):160-170.

Miastkowska, M., dan Sikora, E., 2018, Anti-Aging Properties of Plant Stem Cell Extracts, *Cosmetics*, **5**, 55.

Muliati, Nurhidayah, T., dan Nurbaiti, 2017, Pengaruh NAA, BAP dan Kombinasinya pada Media MS terhadap Perkembangan Eksplan *Sansevieria Macrophylla* secara *In Vitro*, *JOM FAPERTA*, **Vol. 4**, No. 1.

Olmos, G. dan Lladó, J., 2014, Tumor Necrosis Factor Alpha : A Link between Neuroinflammation and Excitotoxicity, *Hindawi Publishing Corporation*, 12.

Ortiz, A. A., Yan, B., dan D'Orazio, J. A., 2015, Ultraviolet Radiation, Aging, and The Skin: Prevention of Damage by Topical Camp Manipulation, *National Institue Health Public Access*, **19**(5), 6202–6219.

Ozougwu, J. C., 2016, The Role of Reactive Oxygen Species and Antioxidants in Oxidative Stress, *Sryahwa Publication*, **3**(6), 1–8.

Panich, U., Sittithumcharee, G., Rathviboon, N. dan Jirawatnotai, S., 2016, Ultraviolet Radiation-Induced Skin Aging: The Role of DNA Damage and Oxidative Stress in Epidermal Stem Cell Damage Mediated Skin Aging, *Hindawi Publishing Corporation*, 14.

Patwardhan J. dan Bhatt P., 2015, Ultraviolet-B Protective Effect of Flavonoids from *Eugenia Caryophyllata* on human Dermal Fibroblast Cells, *Phcog Mag* 11:397-406.

Poljč, B., Dahmane R., 2012, Free Radicals dan Extrinsic Skin Aging, *Hindawi Publishing Corporation*, 4.

Popa, C., Netea, M. G., Riel, P. L. C. M. Van dan Meer, J. W. M. Van Der, 2007, Review The Role of TNF-A In Chronic Inflammatory Conditions, Intermediary Metabolism, and Cardiovascular Risk, *Journal of Lipid Research*, 48.

Posada, L., 2016, *Solanum Lycopersicum*, Agriculture Science, A Monograph, Colegio Bolivar.

Qin D., Ren, R., Jia, C., dan Chen, L., 2018, Rapamycin Protects Skin Fibroblasts from Ultraviolet B-Induced Photoaging by Suppressing the Production of

Reactive Oxygen Species, *Cellular Physiology and Biochemistry*, 1849–1860.

Rashid, R., Bhat, J. A., Bhat, Z. A., Dar, W. A. dan Shafi, W., 2016, Callus Formation and Organogenesis of Tomato (*Solanum Lycopersicum* L.), *Society for Plant Research*, **25**(2), 234-248.

Rosita, N., Haryadi, D. M., Erawati, T., Nanda, R. P. dan Soeratri, W., 2017, Photostability Study on Character and Antioxidant Activity of Tomato Extract (*Solanum Lycopersicum* L.) in Nanostructured Lipid Carrier (NLC) and Conventional Creame, *International Journal of Drug Delivery Technology*, **7**(1), 71–74.

Rumiwati, Sismindari, Semiarti, E., Milasari, A. F., Sari, D. K., Fitriana N., dan Galuh, S., 2017, Induction from Various Organs of Dragon Fruit, Apple and Tomato on some Mediums, *Pakistan Journal of Biological Sciences*, **20**(5): 244-252.

Sari, H., S., Dwiati, M., dan Budisantoso, I., 2015, Efek NAA dan BAP terhadap Pembentukan Tunas, Daun, dan Tinggi Tunas Stek Mikro *Nepenthes ampullaria* Jack, *Biosfera*, **32**(3), 195- 201.

Scheres, B., 2005, Stem Cells : A Plant Biology Perspective, *Elsevier*, **122**, 499–504.

Schmid, D., Schürch, C., Blum, P., Belser, E., dan Züllli, F., 2008, Plant Stem Cell Extract for Longevity of Skin and Hair, *SÖFW-Journal*, **134**(5).

Senthilraja, P. dan Kathiresan, K., 2015, *In Vitro* Cytotoxicity MTT Assay in Vero, Hepg2 and MCF -7 Cell Lines Study of Marine Yeast, **5**(3), 80–84.

Setiaji, A., 2019, Respon Pertumbuhan, Optimasi Medium Kultur, dan Aktivitas Antioksidan Pasca Perlakuan Cekaman Kekeringan secara *In Vitro* pada Kalus Tomat (*Solanum Lycopersicum* L.), *Skripsi*, Fakultas Biologi, Universitas Gadjah Mada, Yogyakarta.

Shahtalebi, M., Siadat, A. dan Karbasizade, S., 2015, *Preparation and Evaluation of the Clinical Efficacy and Safety of Tomato Lotion Containing Lycopene*, **4**(4), 142–148.

Sharifi, R., Pasalar, P., Kamalinejad, M., Reza, A., Tavangar, S. M., Paknejad, M., Rastegar, H., Sharifi, R., Pasalar, P., Kamalinejad, M. dan Dehpour, A. R., 2013, *The Effect of Silymarin (Silybum Marianum) on Human Skin Fibroblasts in an in Vitro Wound Healing Model Effect of Silymarin (Silybum Marianum) on Human Skin the Fibroblasts in an in Vitro Wound Healing Model*, 209.

Shon, M., Lee, Y., Song, J., Park, T., Lee, J. K., Kim, M., Park, E. dan Kim, G., 2014, *Anti-aging Potential of Extracts Prepared from Fruits and Medicinal*

Herbs Cultivated in the Gyeongnam Area of Korea, **19**, 178–186.

- Singh, P., Rani, B., Chauhan, A. K. dan Maheshwari, R., 2012, Lycopene's Antioxidant Activity in Cosmetics Meadow, *Review Article*, **3**(1), pp. 46–47.
- Sinha, N. dan Dua, D., 2015, Issn Lycopene: Most Potent Antioxidant with Endless Benefits, *International Journal of Pharma and Bio Sciences*, **6**(3), pp. 838–846.
- Siwik, D. A., Chang, D. L. F. dan Colucci, W. S., 2000, Interleukin-1 B and Tumor Necrosis Factor-A Decrease Collagen Synthesis and Increase Matrix Metalloproteinase Activity in Cardiac Fibroblasts in Vitro, *Circulation Research*, **86**(12), 1259–1265.
- Son, J. H., Kim, S., Jang, H. H., Lee, S. N., dan Ahn, K. J., 2018, Protective Effect of Protocatechuic Acid Against Inflammatory Stress Induced in Human Dermal Fibroblasts, *Biomedical Dermatology*, **2**, 9.
- Sorrell, J. M. dan Caplan, A. I., 2004, Fibroblast Heterogeneity : More Than Skin Deep, *Journal of Cell Science*, **117**, 667-675.
- Stahl, W., Heinrich, U., Wiseman, S., Eichler, O., Sies, H. dan Tronnier, H., 2001, Against Ultraviolet Light – Induced Erythema in Humans 1, *Biochemical and Molecular Action Nutrients Research Communication*, (22), 1449–1451.
- Tito, A., Carola, A., Bimonte, M., Barbulova, A., Arciello, S., Laurentiis, F., dan Monoli, I., 2011, A tomato stem cell extract, containing antioxidant compounds and metal chelating factors, protects skin cells from heavy metalinduced damages, *International Journal of Cosmetic Science*, **33**, 543–552.
- Trehan, S., 2017, Plant Stem Cells in Cosmetics : Current Trends and Future Directions, *Future Science*, **3**(4).
- Udommethaporn, S., Tencomnao, T., McGowan, E. M., Boonyaratanakornkit, V., 2016, Assesment of Anti-TNF- α Activities in Keratinocytes Expressing Inducible TNF- α : A Novel Tool for Anti-TNF- α Drug Screening, *New In Vitro Model for Anti- TNF- α Drug Screening*, **10**, 1371.
- Utama, A. D., 2018, Uji Aktivitas Sitoprotektif Ekstrak Air dan etanol Sel Punca Tanaman Tomat (*Solanum Lycopersicum* L.) melalui Modulasi Profil Siklus Sel *Human Dermal Fibroblast Adult* (HDFa) yang Dipaparkan Hidrogen Peroksida (H₂O₂), *Skripsi*, Fakultas Farmasi, Universitas Gadjah Mada, Yogyakarta.

- Vang, R., Gown, A. M., Barry, T. S., Wheeler, D. T., dan Ronnett, B. M., 2006, Immunohistochemistry for Estrogen and Progesterone Receptors in the Distinction of Primary and Metastatic Mucinous Tumors in the Ovary: an Analysys of 124 Case, *Modern Pathology*, **19**, 97-105.
- Xincheng, X., Ali, Z., Weiyi, S., Ghorri, N., Hongbo, S. dan Jinping, D., 2016, Alterations of DNA Methylation in Diverse Grafted Hybrid Tomatoes (*Solanum Lycopersicum* L.), *Pak. J. Agri. Sci.*, **53**(1), 107-112.
- Zare, S., Ahmadi, R., Rostamzadeh, A., Kurd, S., Hejazi, S., Anjomshoa, M. dan Nilforoushzadeh, M. A., 2015, Application of Allogeneic Fibroblast Cells in Cellular Therapy of Recessive Dystrophic Epidermolysis Bullosa, *Journal Skin Stem Cell*, **2**(3), 1–6.
- Zhu, X., Liu, Q., Wang, M., Liang, M., Yang, X., Xu, X., Zou, H. dan Qiu, J., 2011, Activation of Sirt1 by Resveratrol Inhibits TNF-a Induced Inflammation in Fibroblasts, *PLoS ONE*, **6**(11).