

## DAFTAR PUSTAKA

- Abdelhakim, M., Lin, X. and Ogawa, R. (2020) 'The Japanese Experience with Basic Fibroblast Growth Factor in Cutaneous Wound Management and Scar Prevention: A Systematic Review of Clinical and Biological Aspects', *Dermatology and Therapy*, 10(4), pp. 569–587. Available at: <https://doi.org/10.1007/s13555-020-00407-6>.
- Aoshima, K. *et al.* (2013) 'Establishment of Alternative Culture Method for Spermatogonial Stem Cells Using Knockout Serum Replacement', *PLoS ONE*, 8(10), pp. 4–11. Available at: <https://doi.org/10.1371/journal.pone.0077715>.
- Arief, H. and Widodo, M.A. (2018) 'Peranan Stres Oksidatif pada Proses Penyembuhan Luka', *Jurnal Ilmiah Kedokteran Wijaya Kusuma*, 5(2), pp. 22–29. Available at: <https://doi.org/10.30742/jikw.v5i2.338>.
- Arslan, H.O. *et al.* (2023) 'An Overview of Adding ROCK and KSR with Trehalose to a Low Glycerol Tris-based Semen Extender', *Black Sea Journal of Agriculture*, 6(2), pp. 211–214. Available at: <https://doi.org/10.47115/bsagriculture.1155604>.
- Baltes, C. *et al.* (2022) 'Actin Stabilization in Cell Migration', *Frontiers in Cell and Developmental Biology*, 10, pp. 1–8. Available at: <https://doi.org/10.3389/fcell.2022.931880>.
- Bártolo, I. *et al.* (2022) 'Keratinocyte Growth Factor-Based Strategies for Wound Re-Epithelialization', *Tissue Engineering*, 28(3), pp. 665–676. Available at: <https://doi.org/10.1089/ten.teb.2021.0030>.
- Battaglia, R.A. *et al.* (2018) 'Vimentin on The Move: New Developments in Cell Migration', *F1000Research*, 7, pp. 1–10. Available at: <https://doi.org/10.12688/f1000research.15967.1>.
- Benington, L. *et al.* (2020) 'Fibroblast growth factor 2—A Review of Stabilisation Approaches for Clinical Applications', *Pharmaceutics*, 12(6), pp. 1–14. Available at: <https://doi.org/10.3390/pharmaceutics12060508>.
- Bioline (2023) *SensiFAST SYBR No-ROX Kit*. Bioline.
- Chai, J. and Tarnawski, A.S. (2002) 'Serum Response Factor: Discovery,

- Biochemistry, Biological Roles and Implications for Tissue Injury Healing’, *Journal of Physiology and Pharmacology*, 53(2), pp. 147–157.
- Cheng, F. *et al.* (2016) ‘Vimentin Coordinates Fibroblast Proliferation and Keratinocyte Differentiation in Wound Healing via TGF- $\beta$ -Slug Signaling’, *Proceedings of the National Academy of Sciences of the United States of America*, 113(30), pp. E4320–E4327. Available at: <https://doi.org/10.1073/pnas.1519197113>.
- Cheng, F. and Eriksson, J.E. (2017) ‘Intermediate Filaments and The Regulation of Cell Motility during Regeneration and Wound Healing’, *Cold Spring Harbor Perspectives in Biology*, 9(9), pp. 1–14. Available at: <https://doi.org/10.1101/cshperspect.a022046>.
- Crendhuty, F.D. and Megantara, S. (2019) ‘Sediaan Hidrogel Mengandung Epidermal Growth Factor dalam Penyembuhan Luka’, *Farmaka*, 17(2), pp. 410–416.
- Damayanti, F. and Wathon, S. (2017) ‘Peningkatan Performa Pertumbuhan Kultur Sel Fibroblas dan Aplikasinya untuk Perbaikan Jaringan yang Rusak’, *Jurnal BioTrends*, 8(2), pp. 32–39.
- Deshpande, A. *et al.* (2022) ‘SRF: a Seriously Responsible Factor in Cardiac Development and Disease’, *Journal of Biomedical Science*, 29(1), pp. 1–21. Available at: <https://doi.org/10.1186/s12929-022-00820-3>.
- Dinsmore, C.J. and Soriano, P. (2022) ‘Differential Regulation of Cranial and Cardiac Neural Crest by Serum Response Factor and its Cofactors’, *eLife*, 11, pp. 1–25. Available at: <https://doi.org/10.7554/eLife.75106>.
- Elliyanti, A. (2016) ‘Peran C-Fos sebagai Agen Proliferasi dan Pro-Apoptosis Sebagai Strategi Pengembangan Pengobatan Kanker’, *Majalah Kedokteran Andalas*, 39(2), pp. 73–78. Available at: <https://doi.org/10.22338/mka.v39.i2.p73-78.2016>.
- Esnault, C. *et al.* (2014) ‘Rho-actin Signaling to The MRTF Coactivators Dominates the Immediate Transcriptional Response to Serum in Fibroblasts’, *Genes and Development*, 28(9), pp. 943–958. Available at: <https://doi.org/10.1101/gad.239327.114>.
- Febrianti, N., Tahir, T. and Yusuf, S. (2019) ‘Study Literature Peran Epidermal

- Growth Factor dalam Proses Penyembuhan Luka’, *Jurnal Keperawatan Muhammadiyah*, 4(1), pp. 7–13. Available at: <https://doi.org/10.30651/jkm.v4i1.1852>.
- Finch, P.W. and Rubin, J.S. (2004) ‘Keratinocyte Growth Factor/Fibroblast Growth Factor 7, a Homeostatic Factor with Therapeutic Potential for Epithelial Protection and Repair’, *Advances in Cancer Research*, 91, pp. 69–136. Available at: [https://doi.org/10.1016/S0065-230X\(04\)91003-2](https://doi.org/10.1016/S0065-230X(04)91003-2).
- Firakania, C. (2015) *Penghambatan Proliferasi Sel Mononukleus Darah Tepi (SMDT) Manusia oleh Avidin, Pascastimulasi Fitohemaglutinin (PHA) dan Interleukin-2 (IL-2)*. Depok: Universitas Indonesia.
- Garcia-Gonzalo, F.R. and Belmonte, J.C.I. (2008) ‘Albumin-Associated Lipids Regulate Human Embryonic Stem Cell Self-Renewal’, *PLoS ONE*, 3(1), pp. 1–10. Available at: <https://doi.org/10.1371/journal.pone.0001384>.
- Gomes, D.S. *et al.* (2019) ‘Supplementation of Culture Medium with Knockout Serum Replacement Improves The Survival of Bovine Secondary Follicles when Compared with Other Protein Sources During In Vitro Culture’, *Zygote*, 28(1), pp. 32–36. Available at: <https://doi.org/10.1017/S0967199419000583>.
- Gualdrini, F. *et al.* (2016) ‘SRF Co-factors Control the Balance between Cell Proliferation and Contractility’, *Molecular Cell*, 64(6), pp. 1048–1061. Available at: <https://doi.org/10.1016/j.molcel.2016.10.016>.
- Hadi, R.S. and Sandra, Y. (2020) ‘Pengaruh Glukosa Tinggi terhadap Proliferasi , Migrasi dan Ekspresi Gen OCT-4 pada Kultur Sel Dermal Fibroblast Manusia’, *Majalah Kesehatan PharmaMedika*, 12(1), pp. 32–38.
- Herdawati, T. and Kurniawaty, E. (2019) ‘Sel Punca Mesenkimal sebagai Terobosan Terapi pada Luka Bakar Derajat II’, *Majority*, 8(2), pp. 299–304. Available at: <http://juke.kedokteran.unila.ac.id/index.php/majority/article/view/2485>.
- Hidayah, T. and Barlian, A. (2021) ‘Peran Ekstrak Kulit Batang *Leea angulata* Pada Tahap Proliferasi dalam Proses Penyembuhan Luka Kulit Mencit (*Mus musculus*)’, *Jurnal Sumberdaya Hayati*, 7(2), pp. 71–77. Available at: <https://doi.org/10.29244/jsdh.7.2.71-77>.

- Huang, C. *et al.* (2013) ‘Keloids and Hypertrophic Scars: Update and Future Directions’, *Plastic and Reconstructive Surgery*, 1(4), pp. 1–7. Available at: <https://doi.org/10.1097/GOX.0b013e31829c4597>.
- Jiang, Y. *et al.* (2020) ‘Cryopreservation of Calf Testicular Tissues with Knockout Serum Replacement’, *Cryobiology*, 92, pp. 255–257. Available at: <https://doi.org/10.1016/j.cryobiol.2020.01.010>.
- Juanpere, N. *et al.* (2012) ‘Mutations in FGFR3 and PIK3CA, Singly or Combined with RAS and AKT1, are Associated with AKT but not with MAPK Pathway Activation in Urothelial Bladder Cancer’, *Human Pathology*, 43(10), pp. 1573–1582. Available at: <https://doi.org/10.1016/j.humpath.2011.10.026>.
- Kalangi, S.J.R. (2014) ‘Histofisiologi Kulit’, *Jurnal Biomedik (Jbm)*, 5(3), pp. 12–20. Available at: <https://doi.org/10.35790/jbm.5.3.2013.4344>.
- Kim, E. *et al.* (2010) ‘Effects of Knockout Serum Replacement in the Culture Medium on the Proliferation of Porcine Fetal Fibroblasts In Vitro’, *International Journal of Oral Biology*, 35(1), pp. 1–5.
- Koegel, H. *et al.* (2009) ‘Loss of Serum Response Factor in Keratinocytes Results in Hyperproliferative Skin Disease in Mice’, *The Journal of Clinical Investigation*, 119(4), pp. 899–910. Available at: <https://doi.org/10.1172/JCI37771>.
- Kurniawati, Y. *et al.* (2015) ‘Kultur Primer Fibroblas: Penelitian Pendahuluan’, *Majalah Kedokteran Andalas*, 38(1), pp. 34–40. Available at: <https://doi.org/10.22338/mka.v38.i1.p33-40.2015>.
- Kusumaningrum, E., Suryono and Rahman, E.F. (2022) ‘Pengaruh Pemberian Topikal Gel Propolis 10 % dan Fototerapi Near Infrared Pada Penyembuhan Luka Pasca Kuretase Studi terhadap Tikus Sprague dawley Ditinjau dari Jumlah Pembuluh Darah Baru ( Angiogenesis )’, *Prosiding Konstelasi Ilmiah Mahasiswa Unissula (KIMU)* 7, 023, pp. 72–85.
- Kwon, P.K. *et al.* (2021) ‘Isoprocurcumenol Supports Keratinocyte Growth and Survival through Epidermal Growth Factor Receptor Activation’, *International Journal of Molecular Sciences*, 22(22), pp. 1–12. Available at: <https://doi.org/10.3390/ijms222212579>.

- Lämmermann, I. *et al.* (2018) 'Blocking Negative Effects of Senescence in Human Skin Fibroblasts with a Plant Extract', *Nature Parther Journals*, 4(4), pp. 1–10. Available at: <https://doi.org/10.1038/s41514-018-0023-5>.
- Laut, M. *et al.* (2019) 'Efektivitas Pemberian Salep Ekstrak Etanol Daun Anting-anting (*Acalypha indica* Linn.) terhadap Kesembuhan Luka Insisi pada Mencit (*Mus musculus*)', *Jurnal Kajian Veteriner*, 7(1), pp. 1–11. Available at: <https://doi.org/10.35508/jkv.v7i1.01>.
- Lee, D.Y. *et al.* (2022) 'Review of the Current Research on Fetal Bovine Serum and the Development of Cultured Meat', *Food Science of Animal Resources*, 42(5), pp. 775–799. Available at: <https://doi.org/10.5851/kosfa.2022.e46>.
- Li, X. *et al.* (2014) 'Human Dermal Fibroblast Migration Induced by Fibronectin in Autocrine and Paracrine Manners', *Experimental Dermatology*, 23(9), pp. 682–684. Available at: <https://doi.org/10.1111/exd.12447>.
- Mayun, I.G.N. (2017) *Peran Intermediate Filament Dalam Diagnosis Kanker*. Bali: Universitas Udayana.
- Miano, J.M., Long, X. and Fujiwara, K. (2007) 'Serum Response Factor: Master Regulator of The Actin Cytoskeleton and Contractile Apparatus', *American Journal of Physiology - Cell Physiology*, 292(1), pp. 70–81. Available at: <https://doi.org/10.1152/ajpcell.00386.2006>.
- Nakao, S., Ogata, Y. and Sugiya, H. (2009) 'Nicotine Stimulates The Expression of Cyclooxygenase-2 mRNA via NFκB Activation in Human Gingival Fibroblasts', *Archives of Oral Biology*, 54(3), pp. 251–257. Available at: <https://doi.org/10.1016/j.archoralbio.2008.11.006>.
- Neldawati, Gusnedi and Ratnawulan (2013) 'Analisis Nilai Absorbansi dalam Penentuan Kadar Flavonoid untuk Berbagai Jenis Daun Tanaman Obat', *Pillar of Physics*, 2, pp. 76–83.
- Onuh, J.O. and Qiu, H. (2021) 'Serum Response Factor-Cofactor Interactions and Their Implications in Disease', *FEBS Journal*, 288(10), pp. 3120–3134. Available at: <https://doi.org/10.1111/febs.15544>.
- Orsted, H.L. *et al.* (2011) 'Basic Principles of Wound Healing', *Wound Care Canada*, 9(2), pp. 1–10.

- Pratiwi, L. (2020) 'Pengaruh Pemberian Salep Kolagen Hidrolisat Ikan Sebagai Penyembuhan Luka Bakar Derajat IIB Berdasarkan Ekspresi Fibroblast Growth Factor 2 (FGF-2) dan Fibroblas pada Tikus Putih (*Rattus norvegicus*)', *Media Kedokteran Hewan*, 31(2), p. 52. Available at: <https://doi.org/10.20473/mkh.v31i2.2020.52-63>.
- Purnama, H., Sriwidodo and Ratnawulan, S. (2017) 'Review Sistematis: Proses Penyembuhan dan Perawatan Luka', *Farmaka*, 15(2), pp. 251–258.
- Rachmawati, E., Karyono, S. and Suyuti, H. (2012) 'Efek Ekstrak Etanolik Daun Sirsak pada Proliferasi dan Apoptosis Sel HeLa yang Dimediasi oleh p53', *Jurnal Kedokteran Brawijaya*, 27(1), pp. 28–33.
- Rahman, V.R., Bratadiredja, M.A. and Saptarini, N.M. (2021) 'Artikel Review: Potensi Kolagen sebagai Bahan Aktif Sediaan Farmasi', *Majalah Farmasetika*, 6(3), pp. 253–286. Available at: <https://doi.org/10.24198/mfarmasetika.v6i3.33621>.
- Ramadhanty, A. (2020) *Efektivitas Lencir Bekicot (Achatina fulica) terhadap Migrasi Sel Fibroblas dengan Kultur Monolayer dan Tinjauannya dari Sisi Islam*. Jakarta: Universitas YARSI.
- Rara, R. et al. (2020) *Studi Literatur: Teknik Kultur Dalam Teknologi Biomanufaktur Pluripotent Stem Cells In Vitro*. Yogyakarta: Universitas Aisyiyah.
- Reda, A. et al. (2017) 'Knock-Out Serum Replacement and Melatonin Effects on Germ Cell Differentiation in Murine Testicular Explant Cultures', *Annals of Biomedical Engineering*, 45(7), pp. 1783–1794. Available at: <https://doi.org/10.1007/s10439-017-1847-z>.
- Rohmah, M.K. (2021) 'Pengaruh Jenis Substrat dan Serum Terhadap Aktivitas Penempelan, Proliferasi dan Diferensiasi Kultur Sel Myoblast C2C12', *LenteraBio: Berkala Ilmiah Biologi*, 10(2), pp. 134–139. Available at: <https://doi.org/10.26740/lenterabio.v10n2.p134-139>.
- Rosada, A., Mujayanto, R. and Poetri, A.R. (2020) 'Ekstrak Daun Salam Dalam Meningkatkan Ekspresi Fibroblast Growth Factor Pada Ulkus Traumatik Rongga Mulut', *ODONTO: Dental Journal*, 7(2), p. 90. Available at: <https://doi.org/10.30659/odj.7.2.90-96>.

- Rosadi, I. *et al.* (2020) 'Perbandingan Kemampuan Migrasi Adipose-Derived Stem Cells Asal Manusia pada Berbagai Medium Pertumbuhan', *Bioeksperimen*, 6(1), pp. 45–51. Available at: <https://doi.org/10.23917/bioeksperimen.v5i1.2795>.
- Russo, B., Brembilla, N.C. and Chizzolini, C. (2020) 'Interplay Between Keratinocytes and Fibroblasts: A Systematic Review Providing a New Angle for Understanding Skin Fibrotic Disorders', *Frontiers in Immunology*, 11(5), pp. 1–20. Available at: <https://doi.org/10.3389/fimmu.2020.00648>.
- Seeger, M.A. and Paller, A.S. (2015) 'The Roles of Growth Factors in Keratinocyte Migration', *Advances in Wound Care*, 4(4), pp. 213–224. Available at: <https://doi.org/10.1089/wound.2014.0540>.
- Suarez-Arnedo, A. *et al.* (2020) 'An Image J Plugin for The High Throughput Image Analysis of In Vitro Scratch Wound Healing Assays', *PLoS ONE*, 15(7), pp. 1–14. Available at: <https://doi.org/10.1371/journal.pone.0232565>.
- Sumbayak, E.M. (2015) 'Fibroblas : Struktur dan Peranannya dalam Penyembuhan Luka', *Jurnal Kedokteran Meditek*, 21(6), pp. 1–6. Available at: <http://ejournal.ukrida.ac.id/ojs/index.php/Meditek/article/view/1169>.
- Sumitomo, A. *et al.* (2019) 'LPA Induces Keratinocyte Differentiation and Promotes Skin Barrier Function through the LPAR1/LPAR5-RHO-ROCK-SRF Axis', *Journal of Investigative Dermatology*, 139(5), pp. 1010–1022. Available at: <https://doi.org/10.1016/j.jid.2018.10.034>.
- Syahidah, H.N. and Hadisaputri, Y.E. (2016) 'Review Artikel: Media Yang Digunakan Pada Kultur Sel', *Farmaka*, 14(3), pp. 27–36. Available at: <http://jurnal.unpad.ac.id/farmaka/article/view/10615>.
- Tang, D.D. and Gerlach, B.D. (2017) 'The Roles and Regulation of The Actin Cytoskeleton, Intermediate Filaments and Microtubules in Smooth Muscle Cell Migration', *Respiratory Research*, 18(54), pp. 1–12. Available at: <https://doi.org/10.1186/s12931-017-0544-7>.
- Tarnawski, A.S. and Ahluwalia, A. (2021) 'The Critical Role of Growth Factors in Gastric Ulcer Healing: The Cellular and Molecular Mechanisms and

- Potential Clinical Implications’, *Cells*, 10(8), pp. 1–19. Available at: <https://doi.org/10.3390/cells10081964>.
- Toyobo (2017) *Instruction manual ReverTra Ace TM qPCR RT Master Mix with gDNA remover2004*, Toyobo. Toyobo. Available at: [www.toyobo.co.jp/e/bio](http://www.toyobo.co.jp/e/bio).
- Veltmann, M. *et al.* (2016) ‘Osmotic Induction of Angiogenic Growth Factor Expression in Human Retinal Pigment Epithelial Cells’, *PLoS ONE*, 11(1), pp. 1–21. Available at: <https://doi.org/10.1371/journal.pone.0147312>.
- Verdoni, A.M., Ikeda, S. and Ikeda, A. (2010) ‘Serum Response Factor is Essential for The Proper Development of Skin Epithelium’, *Mammalian Genome*, 21(1–2), pp. 64–76. Available at: <https://doi.org/10.1007/s00335-009-9245-y>.
- Vicente-Manzanares, M., Choi, C.K. and Horwitz, A.R. (2009) ‘Integrins in Cell Migration - The Actin Connection’, *Journal of Cell Science*, 122(9), pp. 199–206. Available at: <https://doi.org/10.1242/jcs.052894>.
- Vickers, E.R. *et al.* (2004) ‘Ternary Complex Factor-Serum Response Factor Complex-Regulated Gene Activity Is Required for Cellular Proliferation and Inhibition of Apoptotic Cell Death’, *Molecular and Cellular Biology*, 24(23), pp. 10340–10351. Available at: <https://doi.org/10.1128/mcb.24.23.10340-10351.2004>.
- Waryastuty, H., Irianingsih, S.H. and Wasito, R. (2021) ‘Deteksi Kontaminasi Bovine Viral Diarrhea Virus Pada Fetal Bovine Serum Yang Tersedia Secara Komersial’, *Jurnal Veteriner*, 22(2), pp. 229–236. Available at: <https://doi.org/10.19087/jveteriner.2021.22.2.229>.
- Wen-jing, Z. *et al.* (2005) ‘Issues within Keratinocyte Growth Factor (KGF) Research’, *Journal of Forestry Research*, 16(4), pp. 335–338. Available at: <https://doi.org/10.1007/bf02858203>.
- Wojtowicz, A.M. *et al.* (2014) ‘The Importance of Both Fibroblasts and Keratinocytes in a Bilayered Living Cellular Construct used in Wound Healing’, *Wound repair and regeneration: official publication of the Wound Healing Society [and] the European Tissue Repair Society*, 22(2), pp. 246–255. Available at: <https://doi.org/10.1111/wrr.12154>.



Yadav, V. and Denning, M.F. (2011) 'Fyn is Induced by Ras/PI3K/Akt Signaling and is Required for Enhanced Invasion/Migration', *Molecular Carcinogenesis*, 50(5), pp. 346–352. Available at: <https://doi.org/10.1002/mc.20716>.

Zymo Research (2023) *Quick -RNA<sup>TM</sup> Miniprep Plus Kit*, Zymo Reserach Corporation.