

DAFTAR PUSTAKA

- Abe, S., Kaida, A., Kanemaru, K., Nakazato, K., Yokomizo, N., Kobayashi, Y., Miura, M., Miki, T., Hidai, C., Kitano, H., & Yoda, T. (2022). Differences in the stemness characteristics and molecular markers of distinct human oral tissue neural crest-derived multilineage cells. *Cell Proliferation*, 55(10), 1–15.
- Adams, G. (2020). A beginner's guide to RT-PCR, qPCR and RT-qPCR. *The Biochemist*, 42(3), 48-53.
- Ali, H., Al-yatama, M. K., Abu-farha, M., Behbehani, K., & Al, A. (2015). Multi-Lineage Differentiation of Human Umbilical Cord Wharton ' s Jelly Mesenchymal Stromal Cells Mediates Changes in the Expression Profile of Stemness Markers. *PLoS ONE*, 10(4), 1–18.
- Apte, A., & Daniel, S. (2009). Information Panel PCR Primer Design. *Cold Spring Harbor Laboratory Press*, 4(3), 1–10.
- Arnhold, S. J., Goletz, I., Klein, H., Stumpf, G., Beluche, L. A., Rohde, C., Addicks, K. & Lutz, F. (2007). Isolation and characterization of bone marrow– derived equine mesenchymal stem cells. *AJVR*, 68(10), 1095–1105.
- Beaver, B. V. (2019). Chapter 1 - The History of Horses and Their Relationship to Humans. In *Equine Behavioral Medicine* (hal. 1–30). London: Elsevier Inc.
- Bianco, P., Robey, P. G., & Simmons, P. J. (2008). Commentary Mesenchymal Stem Cells : Revisiting History , Concepts , and Assays. *Cell Stem Cell*, 2(4), 313–319.
- Biassoni, R., & Walker, J. M. (2014). *Quantitative Real-Time PCR Methods and Protocols IN Series Editor*. New York: Humana Press.
- Bongso, A., & Hin Lee, E. (2005). *Stem Cells From Bench to Bedside*. Singapore: World Scientific Publishing Co. Pte. Ltd.
- Boucher, S., Lakshmiathy, U., & Vemuri, M. (2009). A simplified culture and polymerase chain reaction identification assay for quality control performance testing of stem cell media products. *Cytotherapy*, 11(6), 761–767.
- Bundgaard, L., Stensballe, A., Elbæk, K. J., & Berg, L. C. (2018). Mapping of equine mesenchymal stromal cell surface proteomes for identification of specific markers using proteomics and gene expression analysis : an in vitro cross-sectional study. *Stem Cell Research & Therapy*, 9(288), 1–10.

- Burk, J., Badylak, S. F., Kelly, J., & Brehm, W. (2013). Equine cellular therapy- from stall to bench to bedside? *Cytometry Part A*, 83 A(1), 103–113.
- Calloni, R., Cordero, E. A. A., Henriques, J. A. P., & Bonatto, D. (2013). Reviewing and updating the major molecular markers for stem cells. *Stem Cells and Development*, 22(9), 1455–1476.
- Campos, L. S. (2005). b 1 integrins and neural stem cells : making sense of the extracellular environment. *BioEssays*, 27(7), 698–707.
- Cavaleri, F., & Schöler, H. R. (2003). Nanog: A New Recruit to the Embryonic Stem Cell Orchestra. *Cell*, 113(5), 551–552.
- Chalisserry, E. P., Nam, S. Y., Park, S. H., & Anil, S. (2017). Therapeutic potential of dental stem cells. *Journal of Tissue Engineering*, 8, 1–17.
- Chandar, N., & Viselli, S. (2019). *Lippincott Illustrated Reviews: Cell and Molecular Biology* (Second Ed.). Philadelphia: Wolters Kluwer.
- Clark, D., Pazdernik, N., & McGehee, M. R. (2019). *Molecular biology. Molecular biology* (3 ed.). Amsterdam: Elsevier Inc.
- Cohen, S., Samadikuchaksaraei, A., Polak, J. M., & Bishop, A. E. (2006). Antibiotics reduce the growth rate and differentiation of embryonic stem cell cultures. *Tissue Engineering*, 12(7), 2025–2030.
- Cooper, G. M., & Hausman, R. E. (2007). *The Cell: A molecular Approach 4 edition*. Wasington: ASM Press.
- Davies, O. G., Cooper, P. R., Shelton, R. M., Smith, A. J., & Scheven, B. A. (2015). Isolation of adipose and bone marrow mesenchymal stem cells using CD29 and CD90 modifies their capacity for osteogenic and adipogenic differentiation. *Journal of Tissue Engineering*, 6(1), 1–10.
- Dominici, M., Le Blanc, K., Mueller, I., Slaper-Cortenbach, I., Marini, F. C., Krause, D. S., Deans, R. J., Keating, A., Prockop, D. J., & Horwitz, E. M. (2006). Minimal criteria for defining multipotent mesenchymal stromal cells. The International Society for Cellular Therapy position statement. *Cytotherapy*, 8(4), 315–317.
- Driesen, R. B., Gervois, P., Vangansewinkel, T., & Lambrichts, I. (2021). Unraveling the Role of the Apical Papilla During Dental Root Maturation. *Frontiers in Cell and Developmental Biology*, 9(665600), 1–7.
- Dubey, A., Lavanya, L., Sadananda, D., Gouthami, K., Elfansu, K., Singh, A., & Singh, A. (2021). Inferences of Carbon Dioxide in Present-Day Cell Culture Systems: An Unacknowledged Problem and Perspectives. *Austin*

Therapeutics, 6(1), 1–8.

- Eagle, H. (1955). Nutrition Needs of Mammalian Cells in Tissue Culture. *Science*, 122(3), 2–5.
- Easley, J., Dixon, P. M., Schumacher, J., Barakzai, S. Z., Bennett, D. G., Boehler, A., Carmalt, J. L., Dacre, I. T., Dixon, P. M., Doherty, T., Toit, N. du, Easley, J., Galloway, M. S., Galloway, S. S., Greet, T., Hatzel, J., Henry, T., Kelly, D. F., Knottenbelt, D. C., ... Weller, R. (2011). *Equine Dentistry*. (J. Easley, P.M. Dixon, & J.B.T.-E.D. (Third E. Schumacher,Ed.), *Equine Dentistry*. Edinburgh: W.B. Saunders.
- Esser, P. (2010). *pH and Pressure in Closed Tissue Culture Vessels*. Thermo Fisher Scientific Inc.
- Esteves, C. L., Sharma, R., Dawson, L., Taylor, S. E., Pearson, G., Keen, J. A., McDonald, K., Aurich, C. & Donadeu, F. X. (2014). Expression of putative markers of pluripotency in equine embryonic and adult tissues. *Veterinary Journal*, 202(3), 533–535.
- Fakhry, M., Hamade, E., Badran, B., Buchet, R., & Magne, D. (2013). Molecular mechanisms of mesenchymal stem cell differentiation towards osteoblasts. *World J Stem Cells*, 5(4), 136–148.
- Fracaro, L., Senegaglia, A. C., Herai, R. H., Leitolis, A., Boldrini-Leite, L. M., Rebelatto, C. L. K., Travers, P. J., Brofman, P. R. S. & Correa, A. (2020). The Expression Profile of Dental Pulp-Derived Stromal Cells Supports Their Limited Capacity to Differentiate into Adipogenic Cells. *International Journal of Molecular Sciences*, 21(8), 1–17.
- Friedenstein, J., Petrakova, K., Kurolesova, I., Frolova, G., & Al., E. (1968). Heterotopic Trasplant of Bone Marrow. *Sustainability (Switzerland)*, 6(2), 231–247.
- Furst, P. (2001). Glutamine Metabolism: Nutritional and Clinical Significance New Developments in Glutamine Delivery 1. *J. Nutr*, 131(9), 2562–2568.
- Giordano, G., Monaca, G. La, Annibali, S., Cicconetti, A., Ottolenghi, L., Giordano, G., & Portuensi, V. C. (2011). Stem Cells from Oral Niches: A Review. *Annal di Stomatologia*, 2(1-2)(6), 3–8.
- Govoni, K. E. (2015). Horse species symposium: Use of mesenchymal stem cells in fracture repair in horses. *Journal of Animal Science*, 93(3), 871–878.
- Green, M. R., & Sambrook, J. (2019). Polymerase Chain Reaction. *Cold Spring Harb Protoc*, 2019(6), 436–457.
- Gstraunthaler, G. (2003). Alternatives to the Use of Fetal Bovine Serum : *ALTEX*

20, 4(3), 275–281.

Gugjoo, M. B., & Pal, A. (2020). *Mesenchymal Stem Cell in Veterinary Sciences. Mesenchymal Stem Cell in Veterinary Sciences*. Singapore: Springer Nature Singapore Pte Ltd.

Harshitha, R., & Arunraj, D. R. (2021). Real-time quantitative PCR: A tool for absolute and relative quantification. *Biochemistry and Molecular Biology Education*, 49(5), 800–812.

He, S., Nakada, D., & Morrison, S. J. (2009). Mechanisms of Stem. *The Annual Review of Cell and Developmental Biology*, 25, 377–406.

Hilfiker, A., Kasper, C., Hass, R., & Haverich, A. (2011). Mesenchymal stem cells and progenitor cells in connective tissue engineering and regenerative medicine: Is there a future for transplantation? *Langenbeck's Archives of Surgery*, 396(4), 489–497.

Huang, G. T., Sonoyama, W., & Liu, Y. (2008). The Hidden Treasure in Apical Papilla : The Potential Role in Pulp / Dentin Regeneration and BioRoot Engineering. *J Endod*, 34(6), 645–651.

Humenik, F., Maloveska, M., Hudakova, N., Petrouskova, P., Hornakova, L., Domaniza, M., Cizkova, D. (2022). A Comparative Study of Canine Mesenchymal Stem Cells Isolated from Different Sources. *Animals*, 12(12), 1–13.

Hussein, A., Darwish, Z., Raslan, H., Attia, M., & Abdel-Hamid, H. (2020). Dental Stem Cells (Concepts and Applications). *Alexandria Dental Journal*, 46(1), 66–71.

Isgren, C. M., & Townsend, N. B. (2016). The use of radiography for diagnosis of apical infection of equine cheek teeth. *Equine Veterinary Education*, 28(8), 448–454.

Joshi, M. (2010). Polymerase Chain Reaction: Methods, Principles And Application. *International Journal of Biomedical Research*, 1(5), 81–97.

Kang, J., Fan, W., Deng, Q., He, H., & Huang, F. (2019). Stem Cells from the Apical Papilla: A Promising Source for Stem Cell-Based Therapy. *BioMed Research International*, 2019, 1–8.

Karsenty, G. (2001). Minireview : Transcriptional Control of Osteoblast. *The Endocrine Society*, 142(7), 2731–2733.

Katta, P. K., Sreedhara, S., Savakkanavar, M. B., & Murthy, D. K. (2014). Apical Papilla Stem Cells and its Significance in Regeneration of Dental Tissues. *Indian Journal of Contemporary Dentistry*, 2(2), 102–106.

- King, N. (2010). *RT-PCR Protocols Second Edition*. New York: © Springer Science+Business Media.
- Kook, S., Jo, Y., Lee, H., Seo, B., & Choung, P. (2007). In Vitro Proliferation of Various Human Dental Stem Cells. *Key Engineering Materials Vols*, 343, 165–168.
- Kopen, D., Darwin, J., Prockop, Phinne, G., & Al., E. (1999). Marrow stromal cells migrate throughout forebrain and cerebellum, and they differentiate into astrocytes after injection into neonatal mouse brains. *Proc. Natl. Acad. Sci.*, 96(9), 1–6.
- Lange-Consiglio, A., Corradetti, B., Meucci, A., Perego, R., Bizzaro, D., & Cremonesi, F. (2013). Characteristics of equine mesenchymal stem cells derived from amnion and bone marrow: In vitro proliferative and multilineage potential assessment. *Equine Veterinary Journal*, 45(6), 737–744.
- Lee, S.-M., Zhang, Q., & Le, A. D. (2014). Dental Stem Cells : Sources and Potential Applications. *Current Oral Health Reports*, 1, 34–42.
- Lee, T., Hwang, S., Seo, D., Cho, S., Yang, S., Kim, H., Kim, J. & Uh, Y. (2023). Comparative Analysis of Biological Signatures between Freshly Preserved and Cryo-Preserved Bone Marrow Mesenchymal Stem Cells. *Cells*, 12(19), 1–17.
- Lefebvre, V, Behringer, R. R., & Crombrughe, B. De. (2001). L-Sox5 , Sox6 and Sox9 control essential steps of the chondrocyte differentiation pathway. *Osteoarthritis and Cartilage*, 9(1), 69–75.
- Lefebvre, Véronique, & Dvir-ginzberg, M. (2018). SOX9 and the many facets of its regulation in the chondrocyte lineage. *Connect Tissue Res.*, 58(1), 2–14.
- Li, S., Kong, H., Yao, N., Yu, Q., Wang, P., Lin, Y., Wang, J., Kuang, R., Zhao, X., Xu, J., Zhu, Q. & Ni, L. (2011). The role of runt-related transcription factor 2 (Runx2) in the late stage of odontoblast differentiation and dentin formation. *Biochemical and Biophysical Research Communications*, 410(3), 698–704.
- Liu, Q., Gao, Y., & He, J. (2023). Stem Cells from the Apical Papilla (SCAPs): Past, Present, Prospects, and Challenges. *Biomedicines*, 11(2047), 1–13.
- Liu, Z., Lin, Y., Fang, X., Yang, J., & Chen, Z. (2021). Epigallocatechin-3-gallate promotes osteo-/odontogenic differentiation of stem cells from the apical papilla through activating the bmp–smad signaling pathway. *Molecules*, 26(6), 1–15.

- Llobet, L., Montoya, J., López-Gallardo, E., & Ruiz-Pesini, E. (2015). Side effects of culture media antibiotics on cell differentiation. *Tissue Engineering Part C: Methods Side*, 10(62), 1–21.
- Lodish, H., Berk, A., Kaiser, C. A., Krieger, M., Bretscher, A., Ploegh, H., Amon, A. & Martin, K. C. (2008). *Molecular cell biology Eight Edition*. New York: Macmilan Learning.
- Loebel, C., Czekanska, E. M., Bruderer, M., Salzmann, G., Alini, M., & Stoddart, M. J. (2014). In Vitro Osteogenic Potential of Human Mesenchymal Stem Cells Is Predicted by Runx2/Sox9 Ratio Claudia. *Tissue Engineering Part A*, 00(00), 1–9.
- Lorenz, T. C. (2012). Polymerase chain reaction: Basic protocol plus troubleshooting and optimization strategies. *Journal of Visualized Experiments*, (63), 1–14.
- Lu, V., Roy, I. J., Torres, A., Joly, J. H., Ahsan, F. M., Graham, N. A., & Teitell, M. A. (2022). Glutamine-dependent signaling controls pluripotent stem cell fate. *Developmental Cell*, 57(5), 610-623.e8.
- Maksum, I. P. (2017). *PCR Dalam Investigasi Penyakit Mitokondria*. Sumedang: Alqaprint Jatinangor.
- Mensing, N., Gasse, H., Hambruch, N., Haeger, J. D., Pfarrer, C., & Staszzyk, C. (2011). Isolation and characterization of multipotent mesenchymal stromal cells from the gingiva and the periodontal ligament of the horse. *BMC Veterinary Research*, 7(42), 1–13.
- Metzker, M. L., & College, B. (2009). Polymerase Chain Reaction (PCR). In *Encyclopedia of Life Sciences (ELS)* (hal. 1–10). John Wiley & Sons, Ltd: Chichester.
- Minchin, S., & Lodge, J. (2019). Understanding biochemistry : structure and function of nucleic acids. *Essays in Biochemistry*, 63, 433–456.
- Mogilner, A., & Rubinstein, B. (2005). The Physics of Filopodial Protrusion. *Biophysical Journal*, 89(2), 782–795.
- Mullis, K. B., & Faloona, F. A. (1987). Specific Synthesis of DNA in Vitro via a Polymerase-Catalyzed Chain Reaction. *Methods Enzymol*, 155, 335–350.
- Murphy, M. B., Moncivais, K., & Caplan, A. I. (2013). Mesenchymal stem cells: Environmentally responsive therapeutics for regenerative medicine. *Experimental and Molecular Medicine*, 45(11), 54–16.
- Nada, O. A., & Backly, R. M. El. (2018). Stem Cells From the Apical Papilla (SCAP) as a Tool for Endogenous Tissue Regeneration. *Front. Bioeng.*

Biotechnol, 6(103), 1–19.

Nakamura, S., Yamada, Y., Baba, S., Kato, H., & Kogami, H. (2008). Culture medium study of human mesenchymal stem cells for practical use of tissue engineering and regenerative medicine, 18, 129–136.

Nakashima, M., & Hayashi, Y. (2019). Dental stem cells. In *Encyclopedia of Biomedical Engineering* (Vol. 1, hal. 554–564). Elsevier.

Navarro, E., Castaño, M. J., & Solera, J. (2014). Real-time PCR detection chemistry. *Clinica Chimica Acta*, 439, 231–250.

Ode, A., Kurtz, A., Schmidt-Bleek, K., Schrade, P., Kolar, P., Buttgerit, F., Lehmann, K., Hutmacher, D. W., Duda, G. N. & Kasper, G. (2011). CD73 and CD29 concurrently mediate the mechanically induced decrease of migratory capacity of mesenchymal stromal cells. *European Cells and Materials*, 49(30), 26–50.

Osorno, R., & Chambers, I. (2011). Transcription factor heterogeneity and epiblast pluripotency. *Phil. Trans. R. Soc. B*, 366, 2230–2237.

Panayotov, I., Secret, E., Cunin, F., Gergely, C., Cuisinier, F., & Martin, M. (2014). Initial stem cell adhesion on porous silicon surface : molecular architecture of actin cytoskeleton and filopodial growth. *Nanoscale Research Letters*, 9, 1–10.

Patricia, P. (2002). *Equine Dentistry: A Practical Guide* (Vol. 4). Philadelphia: Lippincott Williams & Wilkins.

Pierantozzi, E., Gava, B., Manini, I., Roviello, F., Marotta, G., Chiavarelli, M., & Sorrentino, V. (2011). Pluripotency Regulators in Human Mesenchymal Stem Cells : Expression of NANOG But Not of OCT-4 and SOX-2. *Stem Cells and Development*, 20(5), 915–925.

Pilgrim, C. R., McCahill, K. A., Rops, J. G., Dufour, J. M., Russell, K. A., & Koch, T. G. (2022). A Review of Fetal Bovine Serum in the Culture of Mesenchymal Stromal Cells and Potential Alternatives for Veterinary Medicine. *Frontiers in Veterinary Science*, 9(859025), 1–11.

Pittenger, M. F., Mackay, A. M., Beck, S. C., Jaiswal, R. K., Douglas, R., Mosca, J. D., Moorman, M. A., Simonetti, D. W., Craig, S. & Marshak, D. R. (1999). Multilineage Potential of Adult Mesenchymal Stem Cells. *Science*, 284(2), 143–146.

Pochampally, R. (2008). *Mesenchymal Stem Cells*. Totowa: Bunnell © Humana Press.

Purwaningrum, M., Giachelli, C. M., Osathanon, T., Rattanapuchpong, S., &

- Sawangmake, C. (2023). Dissecting specific Wnt components governing osteogenic differentiation potential by human periodontal ligament stem cells through interleukin-6. *Scientific Reports*, 13(1), 1–19.
- Purwaningrum, M., Jamilah, N. S., Purbantoro, S. D., Sawangmake, C., & Nantavisai, S. (2021). Comparative characteristic study from bone marrow-derived mesenchymal stem cells. *Journal of Veterinary Science*, 22(6), 1–13.
- Radcliffe, C. H., Flaminio, M. J. B. F., & Fortier, L. A. (2010). Temporal Analysis of Equine Bone Marrow Aspirate During Establishment of Putative Mesenchymal Progenitor Cell Populations. *Stem Cells and Dev*, 19(2), 269–283.
- Rahman, M. T., Uddin, M. S., Sultana, R., Moue, A., & Setu, M. (2013). Polymerase Chain Reaction (PCR): A Short Review. *Anwer Khan Modern Medical College Journal*, 4(1), 30–36.
- Raj, A. (2023). Protein synthesis and Transcription and Translation. *Journal of Biochemistry Research*, 6(2), 20–22.
- Ranera, B., Remacha, A. R., Álvarez-Arguedas, S., Romero, A., Vázquez, F. J., Zaragoza, P., Martín-Burriel, I. & Rodellar, C. (2012). Effect of hypoxia on equine mesenchymal stem cells derived from bone marrow and adipose tissue. *BMC Veterinary Research*, 8(142), 2–13.
- Ririe, K. M., Rasmussen, R. P., & Wittwer, C. T. (1997). Product Differentiation by Analysis of DNA Melting Curves during the Polymerase Chain Reaction, 160(245), 154–160.
- Ruiz-Villalba, A., Ruijter, J. M., & van den Hoff, M. J. B. (2021). Use and misuse of cq in qpcr data analysis and reporting. *Life*, 11(6), 1–22.
- Saiki, R. K., Gelfand, D. H., Stoffel, S., Scharf, S. J., Higuchi, R., Horn, G. T., Mullis, K. B. & Erlich, H. A. (1987). Primer-Directed Enzymatic Amplification of DNA with a Thermostable DNA Polymerase. *Science*, 239(29), 487–491.
- Schmittgen, T. D., & Livak, K. J. (2008). Analyzing real-time PCR data by the comparative CT method. *Nature Protocols*, 3(6), 1101–1108.
- Schnabel, L. V., Fortier, L. A., Wayne McIlwraith, C., & Nobert, K. M. (2013). Therapeutic use of stem cells in horses: Which type, how, and when? *Veterinary Journal*, 197(3), 570–577.
- Shafeeq, N. K. (2021). Polymer Chain Reaction (PCR): Principle and Applications Noorhan. *Ibn Al Haitham Journal for Pure and Applied Science*, 34(4), 35–44.

- Shahid, S., & Irshad, S. (2012). Stem cells and genetic diseases. *Biopolymers and Cell*, 28(5), 329–337.
- Sogandi, S. (2018). *Biologi Molekuler Identifikasi Bakteri Secara Molekuler*. Jakarta Utara: Universitas 17 Agustus 1945 Jakarta.
- Sonoyama, W., Liu, Y., Fang, D., Yamaza, T., Seo, B., Zhang, C., Liu, H., Gronthos, S. & Wang, C. (2006). Mesenchymal Stem Cell-Mediated Functional Tooth Regeneration in Swine. *PLoS ONE*, 79(1), 1–8.
- Sonoyama, W., Liu, Y., Yamaza, T., Tuan, R. S., Wang, S., Shi, S., & Huang, G. T. J. (2008). Characterization of the Apical Papilla and Its Residing Stem Cells from Human Immature Permanent Teeth: A Pilot Study. *Journal of Endodontics*, 34(2), 166–171.
- Soundararajan, M., & Kannan, S. (2018). Fibroblasts and mesenchymal stem cells: Two sides of the same coin? *Journal of Cellular Physiology*, 233(12), 9099–9109.
- Staszky, C., Suske, A., & Pöschke, A. (2015). Equine dental and periodontal anatomy: A tutorial review. *Equine Veterinary Education*, 27(9), 474–481.
- Steiner, C. C., & Ryder, O. A. (2011). Molecular phylogeny and evolution of the Perissodactyla. *Zoological Journal of the Linnean Society*, 163(4), 1289–1303.
- Taemeh, S. Y., Mehrzad, J., & Dehghani, H. (2021). Effect of Glutamine Stability on the Long-term Culture and Line Establishment of Chicken Primordial Germ Cells. *Journal of Cell and Molecular Research*, 13(1), 44–53.
- Tavassoli, M., & Crosby, W. H. (1968). Transplantation Marrow. *Science*, 161(3836), 54–56.
- Till, J., McCulloch, E., & Siminovitch, L. (1964). A Stochastic Model of Stem Cell Proliferation, Based on The Growth of Spleen Colony-Forming Cells. *Transplantation*, 2(5), 29–36.
- Tzamelis, I., Fang, H., Ollero, M., Shi, H., Hamm, J. K., Kievit, P., Hollenberg, A. N. & Flier, J. S. (2004). Regulated production of a peroxisome proliferator-activated receptor- γ ligand during an early phase of adipocyte differentiation in 3T3-L1 adipocytes. *Journal of Biological Chemistry*, 279(34), 36093–36102.
- Ullah, I., Subbarao, R. B., & Rho, G. J. (2015). Human mesenchymal stem cells - Current trends and future prospective. *Bioscience Reports*, 35, 1–19.
- Väänänen, H. K. (2005). Mesenchymal stem cells. *Annals of Medicine*, 37(7),

469–479.

- Vanguilder, H. D., Vrana, K. E., Freeman, W. M., Vanguilder, H. D., Vrana, K. E., Twenty-, W. M. F., Vanguilder, H. D., Vrana, K. E. & Freeman, W. M. (2018). Twenty-Five Years of Quantitative PCR for Gene Expression Analysis Twenty-five years of quantitative PCR for gene expression analysis. *BioTechniques*, 44, 619–627.
- Vijaasankaran, N., Li, J., Shawle, R., Chen, A., Shiratori, M., Gawlitzek, M., Li, F., Kiss, R., Amanullah, A. & Al., E. (2010). Animal cell culture media. In *Encyclopedia of Industrial Biotechnology: Bioprocess, Bioseparation, and Cell Technology* (hal. 1–15). John Wiley & Sons, Inc.
- Viljoen, G. J., Neland, L. H., & Crowther, J. R. (2005). *Molecular Diagnostic PCR Handbook. Molecular Diagnostic PCR Handbook*. New York: Springer.
- Walker, J. M. (2015). *PCR Primer Design Second Edition*. New York: Humana Press.
- Wang, J., Deng, G., Wang, S., Li, S., Song, P., Lin, K., Xu, X. & He, Z. (2024). Enhancing regenerative medicine: the crucial role of stem cell therapy. *Frontiers in Neuroscience*, 18(1269577), 1–10.
- White, T. J., Arnheim, N., & Erlich, H. A. (1989). The Polymerase Chain Reaction. *Trends in genetics*, 5(6), 185–189.
- Williams, W. V, Rosenbaum, H., & Weiner, D. B. (1992). Technical Effect of RNA Concentration on cDNA Synthesis for DNA Amplification None Dilution. *PCR Methods and Applications*, 2, 86–89.
- Wu, J., Huang, G. T.-J., He, W., Wang, P., Tong, Z., Jia, Q., Dong, L., Niu, Z. & Ni, L. (2012). Basic Fibroblast Growth Factor Enhances Stemness of Human Stem Cells from the Apical Papilla. *Journal of Endodontics*, 38(5), 614–622.
- Yao, T. (2017). Cell Culture Media : History , Characteristics, and Current Issues. *Reproductive Medicine and Biology*, 2, 99–117.
- Yusuf, Z. (2010). Polymerase Chain Reaction. *Jurnal Saintek*, 5(6), 1–6.
- Yuwono, T. (2006). *Teori dan Aplikasi Polymerase Chain Reaction*. Yogyakarta: Andi.
- Zakrzewski, W., Dobrzyński, M., Szymonowicz, M., & Rybak, Z. (2019). Stem cells: past, present, and future. *Stem Cell Research & Therapy*, 10(68), 1–22.
- Zhao, M. H., Kim, N. H., & Cui, X. S. (2016). GlutaMAX prolongs the shelf life

of the culture medium for porcine parthenotes. *Theriogenology*, 85(3), 368–375.

Zhou, G., Zheng, Q., Engin, F., Munivez, E., Chen, Y., Sebald, E., Krakow, D. & Lee, B. (2006). Dominance of SOX9 function over RUNX2 during skeletogenesis. *Proceedings of the National Academy of Sciences of the United States of America*, 103(50), 19004–19009.

Zupan, J. (2021). Mesenchymal Stem/Stromal Cells and Fibroblasts: Their Roles in Tissue Injury and Regeneration, and Age-Related Degeneration. In *Fibroblasts—Advances in Inflammation, Autoimmunity and Cancer* (hal. 1–25). IntechOpen.