

## Daftar Pustaka

- Adegghate, E., Ponery, A.S., 2002. GABA in the endocrine pancreas: cellular localization and function in normal and diabetic rats. *Tissue Cell* 34, 1–6. <https://doi.org/10.1054/tice.2002.0217>
- Afsharmanesh, M.R., Mohammadi, Z., Mansourian, A.R., Jafari, S.M., 2023. A Review of micro RNAs changes in T2DM in animals and humans. *J Diabetes* 15, 649–664. <https://doi.org/10.1111/1753-0407.13431>
- Aryangat, A.V., Gerich, J.E., 2010. Type 2 diabetes: postprandial hyperglycemia and increased cardiovascular risk. *Vascular Health and Risk Management* 6, 145–155. <https://doi.org/10.2147/vhrm.s8216>
- Banks, W.A., Sharma, P., Bullock, K.M., Hansen, K.M., Ludwig, N., Whiteside, T.L., 2020. Transport of Extracellular Vesicles across the Blood-Brain Barrier: Brain Pharmacokinetics and Effects of Inflammation. *Int J Mol Sci* 21, 4407. <https://doi.org/10.3390/ijms21124407>
- Bikkavilli, R.K., Feigin, M.E., Malbon, C.C., 2008. Gao mediates WNT-JNK signaling through Dishevelled 1 and 3, RhoA family members, and MEKK 1 and 4 in mammalian cells. *Journal of Cell Science* 121, 234–245. <https://doi.org/10.1242/jcs.021964>
- Chan, J.Y., Luzuriaga, J., Bensellam, M., Biden, T.J., Laybutt, D.R., 2013. Failure of the adaptive unfolded protein response in islets of obese mice is linked with abnormalities in  $\beta$ -cell gene expression and progression to diabetes. *Diabetes* 62, 1557–1568. <https://doi.org/10.2337/db12-0701>
- Charan, J., Biswas, T., 2013. How to Calculate Sample Size for Different Study Designs in Medical Research? *Indian J Psychol Med* 35, 121–126. <https://doi.org/10.4103/0253-7176.116232>
- Chen, J., Zheng, C.-X., Jin, Y., Hu, C.-H., 2021. Mesenchymal stromal cell-mediated immune regulation: A promising remedy in the therapy of type 2 diabetes mellitus. *Stem Cells* 39, 838–852. <https://doi.org/10.1002/stem.3357>
- Chen, L.-B., Jiang, X.-B., Yang, L., 2004. Differentiation of rat marrow mesenchymal stem cells into pancreatic islet beta-cells. *World J Gastroenterol* 10, 3016–3020. <https://doi.org/10.3748/wjg.v10.i20.3016>
- Chen, Q.-H., Liu, A.-R., Qiu, H.-B., Yang, Y., 2015. Interaction between mesenchymal stem cells and endothelial cells restores endothelial permeability via paracrine hepatocyte growth factor in vitro. *Stem Cell Res Ther* 6, 44. <https://doi.org/10.1186/s13287-015-0025-1>
- Cheon, H., Cho, J.M., Kim, S., Baek, S.-H., Lee, M.-K., Kim, K.-W., Yu, S.-W., Solinas, G., Kim, S.S., Lee, M.-S., 2010. Role of JNK activation in pancreatic beta-cell death by streptozotocin. *Mol Cell Endocrinol* 321, 131–137. <https://doi.org/10.1016/j.mce.2010.02.016>

- Cheyette, B.N.R., Waxman, J.S., Miller, J.R., Takemaru, K.-I., Sheldahl, L.C., Khlebtsova, N., Fox, E.P., Earnest, T., Moon, R.T., 2002a. Dapper, a Dishevelled-Associated Antagonist of  $\beta$ -Catenin and JNK Signaling, Is Required for Notochord Formation. *Developmental Cell* 2, 449–461. [https://doi.org/10.1016/S1534-5807\(02\)00140-5](https://doi.org/10.1016/S1534-5807(02)00140-5)
- Cheyette, B.N.R., Waxman, J.S., Miller, J.R., Takemaru, K.-I., Sheldahl, L.C., Khlebtsova, N., Fox, E.P., Earnest, T., Moon, R.T., 2002b. Dapper, a Dishevelled-associated antagonist of beta-catenin and JNK signaling, is required for notochord formation. *Dev Cell* 2, 449–461. [https://doi.org/10.1016/s1534-5807\(02\)00140-5](https://doi.org/10.1016/s1534-5807(02)00140-5)
- Chiarella, E., Aloisio, A., Scicchitano, S., Bond, H.M., Mesuraca, M., 2021. Regulatory Role of microRNAs Targeting the Transcription Co-Factor ZNF521 in Normal Tissues and Cancers. *Int J Mol Sci* 22, 8461. <https://doi.org/10.3390/ijms22168461>
- Chouw, A., Facicilia, G., Sartika, C.R., Faried, A., Milanda, T., 2022. Factors Influencing the Therapeutic Potential of the MSC-derived Secretome. *Regen. Eng. Transl. Med.* 8, 384–393. <https://doi.org/10.1007/s40883-021-00242-x>
- Daniels Gatward, L.F., Kennard, M.R., Smith, L.I.F., King, A.J.F., 2021. The use of mice in diabetes research: The impact of physiological characteristics, choice of model and husbandry practices. *Diabetic Medicine* 38, e14711. <https://doi.org/10.1111/dme.14711>
- do Nascimento, L.R., Domingueti, C.P., 2019. MicroRNAs: new biomarkers and promising therapeutic targets for diabetic kidney disease. *J Bras Nefrol* 41, 412–422. <https://doi.org/10.1590/2175-8239-JBN-2018-0165>
- Eleazu, C.O., Eleazu, K.C., Chukwuma, S., Essien, U.N., 2013. Review of the mechanism of cell death resulting from streptozotocin challenge in experimental animals, its practical use and potential risk to humans. *J Diabetes Metab Disord* 12, 60. <https://doi.org/10.1186/2251-6581-12-60>
- Elsner, M., Guldbakke, B., Tiedge, M., Munday, R., Lenzen, S., 2000. Relative importance of transport and alkylation for pancreatic beta-cell toxicity of streptozotocin. *Diabetologia* 43, 1528–1533. <https://doi.org/10.1007/s001250051564>
- Fennel, Z.J., Bourrant, P.-E., Kurian, A.S., Petrocelli, J.J., de Hart, N.M.M.P., Yee, E.M., Boudina, S., Keirstead, H.S., Nistor, G., Greilach, S.A., Berchtold, N.C., Lane, T.E., Drummond, M.J., 2024. Stem cell secretome treatment improves whole-body metabolism, reduces adiposity, and promotes skeletal muscle function in aged mice. *Aging Cell* e14144. <https://doi.org/10.1111/accel.14144>
- Giri, B., Dey, S., Das, T., Sarkar, M., Banerjee, J., Dash, S.K., 2018. Chronic hyperglycemia mediated physiological alteration and metabolic distortion leads to organ dysfunction, infection, cancer progression and other pathophysiological consequences: An update on glucose toxicity. *Biomedicine & Pharmacotherapy* 107, 306–328. <https://doi.org/10.1016/j.biopha.2018.07.157>

- Grasedieck, S., Schöler, N., Bommer, M., Niess, J.H., Tumani, H., Rouhi, A., Bloehdorn, J., Liebisch, P., Mertens, D., Döhner, H., Buske, C., Langer, C., Kuchenbauer, F., 2012. Impact of serum storage conditions on microRNA stability. *Leukemia* 26, 2414–2416. <https://doi.org/10.1038/leu.2012.106>
- Grynberg, K., Ma, F.Y., Nikolic-Paterson, D.J., 2017. The JNK Signaling Pathway in Renal Fibrosis. *Frontiers in Physiology* 8.
- Gurung, S., Perocheau, D., Touramanidou, L., Baruteau, J., 2021. The exosome journey: from biogenesis to uptake and intracellular signalling. *Cell Commun Signal* 19, 47. <https://doi.org/10.1186/s12964-021-00730-1>
- Gwam, C., Mohammed, N., Ma, X., 2021. Stem cell secretome, regeneration, and clinical translation: a narrative review. *Ann Transl Med* 9, 70. <https://doi.org/10.21037/atm-20-5030>
- Hahn, M., van Krieken, P.P., Nord, C., Alanentalo, T., Morini, F., Xiong, Y., Eriksson, M., Mayer, J., Kostromina, E., Ruas, J.L., Sharpe, J., Pereira, T., Berggren, P.-O., Ilegems, E., Ahlgren, U., 2020. Topologically selective islet vulnerability and self-sustained downregulation of markers for  $\beta$ -cell maturity in streptozotocin-induced diabetes. *Commun Biol* 3, 1–14. <https://doi.org/10.1038/s42003-020-01243-2>
- Hammouda, M.B., Ford, A.E., Liu, Y., Zhang, J.Y., 2020. The JNK Signaling Pathway in Inflammatory Skin Disorders and Cancer. *Cells* 9, 857. <https://doi.org/10.3390/cells9040857>
- Hashimoto, N., Tanaka, T., 2017. Role of miRNAs in the pathogenesis and susceptibility of diabetes mellitus. *J Hum Genet* 62, 141–150. <https://doi.org/10.1038/jhg.2016.150>
- Hasnan, J., Yusof, M.I., Damitri, T.D., Faridah, A.R., Adenan, A.S., Norbaini, T.H., 2010. Relationship between apoptotic markers (Bax and Bcl-2) and biochemical markers in type 2 diabetes mellitus. *Singapore Med J* 51, 50–55.
- Herberg, J.A., Phillips, S., Beck, S., Jones, T., Sheer, D., Wu, J.J., Prochazka, V., Barr, P.J., Kiefer, M.C., Trowsdale, J., 1998. Genomic structure and domain organisation of the human Bak gene. *Gene* 211, 87–94. [https://doi.org/10.1016/S0378-1119\(98\)00101-2](https://doi.org/10.1016/S0378-1119(98)00101-2)
- Hill, M., Tran, N., 2022. miRNA:miRNA Interactions: A Novel Mode of miRNA Regulation and Its Effect On Disease. *Adv Exp Med Biol* 1385, 241–257. [https://doi.org/10.1007/978-3-031-08356-3\\_9](https://doi.org/10.1007/978-3-031-08356-3_9)
- Hill, M., Tran, N., 2021. Global miRNA to miRNA Interactions: Impacts for miR-21. *Trends in Cell Biology* 31, 3–5. <https://doi.org/10.1016/j.tcb.2020.10.005>
- Jardim, D.P., Poço, P.C.E., Campos, A.H., 2017. Dact1, a Wnt-Pathway Inhibitor, Mediates Human Mesangial Cell TGF- $\beta$ 1-Induced Apoptosis. *J Cell Physiol* 232, 2104–2111. <https://doi.org/10.1002/jcp.25636>
- Jiang, M., Yang, Y., Niu, L., Li, P., Chen, Y., Liao, P., Wang, Y., Zheng, J., Chen, F., He, H., Li, H., Chen, X., 2022. MiR-125b-5p modulates the function of regulatory T cells in tumor microenvironment by targeting TNFR2. *J Immunother Cancer* 10, e005241. <https://doi.org/10.1136/jitc-2022-005241>

- Kaneto, H., Matsuoka, T., 2015. Role of Pancreatic Transcription Factors in Maintenance of Mature  $\beta$ -Cell Function. *International Journal of Molecular Sciences* 16, 6281–6297. <https://doi.org/10.3390/ijms16036281>
- Kaneto, H., Matsuoka, T., Katakami, N., Kawamori, D., Miyatsuka, T., Yoshiuchi, K., Yasuda, T., Sakamoto, K., Yamasaki, Y., Matsuhisa, M., 2007. Oxidative stress and the JNK pathway are involved in the development of type 1 and type 2 diabetes. *Curr Mol Med* 7, 674–686. <https://doi.org/10.2174/156652407782564408>
- Karch, J., Kwong, J.Q., Burr, A.R., Sargent, M.A., Elrod, J.W., Peixoto, P.M., Martinez-Caballero, S., Osinska, H., Cheng, E.H.-Y., Robbins, J., Kinnally, K.W., Molkentin, J.D., 2013. Bax and Bak function as the outer membrane component of the mitochondrial permeability pore in regulating necrotic cell death in mice. *eLife* 2, e00772. <https://doi.org/10.7554/eLife.00772>
- Kaur, N., 2017. Role of Nicotinamide in Streptozotocin Induced Diabetes in Animal Models, in: *Journal of Endocrinology and Thyroid Research*. <https://doi.org/10.19080/JETR.2017.02.555577>
- Khin, P.-P., Lee, J.-H., Jun, H.-S., 2021. A Brief Review of the Mechanisms of  $\beta$ -Cell Dedifferentiation in Type 2 Diabetes. *Nutrients* 13, 1593. <https://doi.org/10.3390/nu13051593>
- Khoshsir, S., Abbaszadeh, H.A., Ahrabi, B., Bahrami, M., Abdollahi, M.A., Khoramgah, M.S., Roozbahany, N.A., Darabi, S., 2018. Evaluation of the effect of BMSCs condition media and methylprednisolone in TGF- $\beta$  expression and functional recovery after an acute spinal cord injury. *Bratisl Lek Listy* 119, 684–691. [https://doi.org/10.4149/BLL\\_2018\\_123](https://doi.org/10.4149/BLL_2018_123)
- Klinker, M.W., Wei, C.-H., 2015. Mesenchymal stem cells in the treatment of inflammatory and autoimmune diseases in experimental animal models. *World J Stem Cells* 7, 556–567. <https://doi.org/10.4252/wjsc.v7.i3.556>
- Krishnan, K., Vijayalakshmi, N., Helen, A., 2011. Methanolic extract of *costus igneus* (N.E.Br.) alleviates dyslipidemia in diabetic rats. *Asian Journal of Pharmaceutical and Clinical Research* 4, 154–157.
- Kumar, A., Singh, U.K., Kini, S.G., Garg, V., Agrawal, S., Tomar, P.K., Pathak, P., Chaudhary, A., Gupta, P., Malik, A., 2015. JNK pathway signaling: a novel and smarter therapeutic targets for various biological diseases. *Future Med Chem* 7, 2065–2086. <https://doi.org/10.4155/fmc.15.132>
- Lagathu, C., Christodoulides, C., Virtue, S., Cawthorn, W.P., Franzin, C., Kimber, W.A., Nora, E.D., Campbell, M., Medina-Gomez, G., Cheyette, B.N.R., Vidal-Puig, A.J., Sethi, J.K., 2009. Dact1, a Nutritionally Regulated Preadipocyte Gene, Controls Adipogenesis by Coordinating the Wnt/ $\beta$ -Catenin Signaling Network. *Diabetes* 58, 609–619. <https://doi.org/10.2337/db08-1180>
- Lambert, M., Jambon, S., Depauw, S., David-Cordonnier, M.-H., 2018. Targeting Transcription Factors for Cancer Treatment. *Molecules* 23, 1479. <https://doi.org/10.3390/molecules23061479>

- Laybutt, D.R., Preston, A.M., Åkerfeldt, M.C., Kench, J.G., Busch, A.K., Biankin, A.V., Biden, T.J., 2007. Endoplasmic reticulum stress contributes to beta cell apoptosis in type 2 diabetes. *Diabetologia* 50, 752–763. <https://doi.org/10.1007/s00125-006-0590-z>
- Lee, J.H., Yang, S.H., Oh, J.M., Lee, M.G., 2010. Pharmacokinetics of drugs in rats with diabetes mellitus induced by alloxan or streptozocin: comparison with those in patients with type I diabetes mellitus. *J Pharm Pharmacol* 62, 1–23. <https://doi.org/10.1211/jpp.62.01.0001>
- Lee, S., Kwak, J.-H., Kim, S.H., Yun, J., Cho, J.-Y., Kim, K., Hwang, D., Jung, Y.-S., 2018. A comparison of metabolomic changes in type-1 diabetic C57BL/6N mice originating from different sources. *Lab Anim Res* 34, 232–238. <https://doi.org/10.5625/lar.2018.34.4.232>
- Li, R.-N., Liu, B., Li, X.-M., Hou, L.-S., Mu, X.-L., Wang, H., Linghu, H., 2017. DACT1 Overexpression in type I ovarian cancer inhibits malignant expansion and cis-platinum resistance by modulating canonical Wnt signalling and autophagy. *Sci Rep* 7, 9285. <https://doi.org/10.1038/s41598-017-08249-7>
- Lim, L.P., Lau, N.C., Garrett-Engele, P., Grimson, A., Schelter, J.M., Castle, J., Bartel, D.P., Linsley, P.S., Johnson, J.M., 2005. Microarray analysis shows that some microRNAs downregulate large numbers of target mRNAs. *Nature* 433, 769–773. <https://doi.org/10.1038/nature03315>
- Livak, K.J., Schmittgen, T.D., 2001. Analysis of relative gene expression data using real-time quantitative PCR and the 2(-Delta Delta C(T)) Method. *Methods* 25, 402–408. <https://doi.org/10.1006/meth.2001.1262>
- Lukomska, B., Stanaszek, L., Zuba-Surma, E., Legosz, P., Sarzynska, S., Drela, K., 2019. Challenges and Controversies in Human Mesenchymal Stem Cell Therapy. *Stem Cells Int* 2019, 9628536. <https://doi.org/10.1155/2019/9628536>
- Markopoulos, G.S., Roupakia, E., Tokamani, M., Alabasi, G., Sandaltzopoulos, R., Marcu, K.B., Kolettas, E., 2018. Roles of NF-κB Signaling in the Regulation of miRNAs Impacting on Inflammation in Cancer. *Biomedicines* 6, 40. <https://doi.org/10.3390/biomedicines6020040>
- Marzi, M.J., Ghini, F., Cerruti, B., de Pretis, S., Bonetti, P., Giacomelli, C., Gorski, M.M., Kress, T., Pelizzola, M., Muller, H., Amati, B., Nicassio, F., 2016. Degradation dynamics of microRNAs revealed by a novel pulse-chase approach. *Genome Res* 26, 554–565. <https://doi.org/10.1101/gr.198788.115>
- Mathew, T.K., Zubair, M., Tadi, P., 2023. Blood Glucose Monitoring, in: StatPearls. StatPearls Publishing, Treasure Island (FL).
- Mathivanan, S., Fahner, C.J., Reid, G.E., Simpson, R.J., 2012. ExoCarta 2012: database of exosomal proteins, RNA and lipids. *Nucleic Acids Res* 40, D1241–1244. <https://doi.org/10.1093/nar/gkr828>
- Mei, L.-L., Wang, W.-J., Qiu, Y.-T., Xie, X.-F., Bai, J., Shi, Z.-Z., 2017. miR-125b-5p functions as a tumor suppressor gene partially by regulating HMGA2 in esophageal squamous cell carcinoma. *PLoS One* 12, e0185636. <https://doi.org/10.1371/journal.pone.0185636>



- Meng, S.-S., Xu, X.-P., Chang, W., Lu, Z.-H., Huang, L.-L., Xu, J.-Y., Liu, L., Qiu, H.-B., Yang, Y., Guo, F.-M., 2018. LincRNA-p21 promotes mesenchymal stem cell migration capacity and survival through hypoxic preconditioning. *Stem Cell Res Ther* 9, 280. <https://doi.org/10.1186/s13287-018-1031-x>
- Munoz-Perez, E., Gonzalez-Pujana, A., Igartua, M., Santos Vizcaíno, E., Hernandez, R., 2021. Mesenchymal Stromal Cell Secretome for the Treatment of Immune-Mediated Inflammatory Diseases: Latest Trends in Isolation, Content Optimization and Delivery Avenues. *Pharmaceutics* 13, 1802. <https://doi.org/10.3390/pharmaceutics13111802>
- Muthu, S., Bapat, A., Jain, R., Jeyaraman, N., Jeyaraman, M., 2021. Exosomal therapy—a new frontier in regenerative medicine. *Stem Cell Investig* 8, 7. <https://doi.org/10.21037/sci-2020-037>
- Múzes, G., Sipos, F., 2022. Mesenchymal Stem Cell-Derived Secretome: A Potential Therapeutic Option for Autoimmune and Immune-Mediated Inflammatory Diseases. *Cells* 11, 2300. <https://doi.org/10.3390/cells11152300>
- Nugrahaningsih, D.A.A., Purwadi, P., Sarifin, I., Bachtar, I., Sunarto, S., Ubaidillah, U., Larasati, I., Satriyo, P.B., Setiasari, D.W., Hasanah, M.N., At-thobari, J., Mubarika, S., 2023. In vivo immunomodulatory effect and safety of MSC-derived secretome. <https://doi.org/10.12688/f1000research.131487.1>
- O'Brien, M.A., Kirby, R., 2008. Apoptosis: A review of pro-apoptotic and anti-apoptotic pathways and dysregulation in disease. *J Vet Emerg Crit Care (San Antonio)* 18, 572–585. <https://doi.org/10.1111/j.1476-4431.2008.00363.x>
- Pistrosch, F., Natali, A., Hanefeld, M., 2011. Is Hyperglycemia a Cardiovascular Risk Factor? *Diabetes Care* 34, S128–S131. <https://doi.org/10.2337/dc11-s207>
- Ratti, M., Lampis, A., Ghidini, M., Salati, M., Mirchev, M.B., Valeri, N., Hahne, J.C., 2020. MicroRNAs (miRNAs) and Long Non-Coding RNAs (lncRNAs) as New Tools for Cancer Therapy: First Steps from Bench to Bedside. *Target Oncol* 15, 261–278. <https://doi.org/10.1007/s11523-020-00717-x>
- Raza, H., John, A., 2012. Streptozotocin-Induced Cytotoxicity, Oxidative Stress and Mitochondrial Dysfunction in Human Hepatoma HepG2 Cells. *Int J Mol Sci* 13, 5751–5767. <https://doi.org/10.3390/ijms13055751>
- Regazzi, R., 2018. MicroRNAs as therapeutic targets for the treatment of diabetes mellitus and its complications. *Expert Opinion on Therapeutic Targets* 22, 153–160. <https://doi.org/10.1080/14728222.2018.1420168>
- REHMSMEIER, M., STEFFEN, P., HÖCHSMANN, M., GIEGERICH, R., 2004. Fast and effective prediction of microRNA/target duplexes. *RNA* 10, 1507–1517. <https://doi.org/10.1261/rna.5248604>
- Sadik, N., Cruz, L., Gurtner, A., Rodosthenous, R.S., Dusoswa, S.A., Ziegler, O., Van Solinge, T.S., Wei, Z., Salvador-Garicano, A.M., Gyorgy, B., Broekman, M., Balaj, L., 2018. Extracellular RNAs: A New Awareness of Old Perspectives. *Methods Mol Biol* 1740, 1–15. [https://doi.org/10.1007/978-1-4939-7652-2\\_1](https://doi.org/10.1007/978-1-4939-7652-2_1)
- Saleem, M., Rahman, S., Eliyovich, F., Laffer, C., Ertuglu, L., Masenga, S., Kirabo, A., 2022. Sox6, A Potential Target for MicroRNAs in Cardiometabolic Disease.

- Current Hypertension Reports 24. <https://doi.org/10.1007/s11906-022-01175-8>
- Si, Y., Zhao, Y., Hao, H., Liu, J., Guo, Y., Mu, Y., Shen, J., Cheng, Y., Fu, X., Han, W., 2012. Infusion of mesenchymal stem cells ameliorates hyperglycemia in type 2 diabetic rats: identification of a novel role in improving insulin sensitivity. *Diabetes* 61, 1616–1625. <https://doi.org/10.2337/db11-1141>
- Slezak-Prochazka, I., Durmus, S., Kroesen, B.-J., van den Berg, A., 2010. MicroRNAs, macrocontrol: Regulation of miRNA processing. *RNA* 16, 1087–1095. <https://doi.org/10.1261/rna.1804410>
- Song, H.K., Hwang, D.Y., 2017. Use of C57BL/6N mice on the variety of immunological researches. *Lab Anim Res* 33, 119–123. <https://doi.org/10.5625/lar.2017.33.2.119>
- Song, J., He, Q., Guo, X., Wang, L., Wang, J., Cui, C., Hu, H., Yang, M., Cui, Y., Zang, N., Yan, F., Liu, F., Sun, Y., Liang, K., Qin, J., Zhao, R., Wang, C., Sun, Z., Hou, X., Li, W., Chen, L., 2021. Mesenchymal stem cell-conditioned medium alleviates high fat-induced hyperglucagonemia via miR-181a-5p and its target PTEN/AKT signaling. *Mol Cell Endocrinol* 537, 111445. <https://doi.org/10.1016/j.mce.2021.111445>
- Ståhl, A., Johansson, K., Mossberg, M., Kahn, R., Karpman, D., 2019. Exosomes and microvesicles in normal physiology, pathophysiology, and renal diseases. *Pediatr Nephrol* 34, 11–30. <https://doi.org/10.1007/s00467-017-3816-z>
- Subra, C., Grand, D., Laulagnier, K., Stella, A., Lambeau, G., Paillasse, M., De Medina, P., Monsarrat, B., Perret, B., Silvente-Poirot, S., Poirot, M., Record, M., 2010. Exosomes account for vesicle-mediated transcellular transport of activatable phospholipases and prostaglandins. *J Lipid Res* 51, 2105–2120. <https://doi.org/10.1194/jlr.M003657>
- Suzuki, D., Leu, N.A., Brice, A.K., Senoo, M., 2014. Expression analysis of Dact1 in mice using a LacZ reporter. *Gene Expr Patterns* 15, 21–30. <https://doi.org/10.1016/j.gep.2014.03.002>
- Tsukita, S., Yamada, T., Takahashi, K., Munakata, Y., Hosaka, S., Takahashi, H., Gao, J., Shirai, Y., Kodama, S., Asai, Y., Sugisawa, T., Chiba, Y., Kaneko, K., Uno, K., Sawada, S., Imai, J., Katagiri, H., 2017. MicroRNAs 106b and 222 Improve Hyperglycemia in a Mouse Model of Insulin-Deficient Diabetes via Pancreatic  $\beta$ -Cell Proliferation. *EBioMedicine* 15, 163–172. <https://doi.org/10.1016/j.ebiom.2016.12.002>
- Ventura-Sobrevilla, J., Boone-Villa, V.D., Aguilar, C.N., Román-Ramos, R., Vega-Avila, E., Campos-Sepúlveda, E., Alarcón-Aguilar, F., 2011. Effect of varying dose and administration of streptozotocin on blood sugar in male CD1 mice. *Proc West Pharmacol Soc* 54, 5–9.
- Venugopal, C., Shamir, C., Senthilkumar, S., Babu, J.V., Sonu, P.K., Nishtha, K.J., Rai, K.S., K, S., Dhanushkodi, A., 2017. Dosage and Passage Dependent Neuroprotective Effects of Exosomes Derived from Rat Bone Marrow

- Mesenchymal Stem Cells: An In Vitro Analysis. *Curr Gene Ther* 17, 379–390. <https://doi.org/10.2174/1566523218666180125091952>
- Wang, H., Yu, L., Huang, P., Zhou, Y., zheng, wangYang, Meng, N., He, R., Xu, Y., Tey, S.K., Cui, Y., 2022. Tumor-associated Exosomes Are Involved in Hepatocellular Carcinoma Tumorigenesis, Diagnosis, and Treatment. *Journal of Clinical and Translational Hepatology* 000, 000–000. <https://doi.org/10.14218/JCTH.2021.00425>
- Wang, S., Kang, W., Go, M.Y.Y., Tong, J.H.M., Li, L., Zhang, N., Tao, Q., Li, X., To, K.F., Sung, J.J.Y., Yu, J., 2012. Dapper homolog 1 is a novel tumor suppressor in gastric cancer through inhibiting the nuclear factor- $\kappa$ B signaling pathway. *Mol Med* 18, 1402–1411. <https://doi.org/10.2119/molmed.2012.00243>
- Wang, Y., Zeng, G., Jiang, Y., 2020. The Emerging Roles of miR-125b in Cancers. *Cancer Manag Res* 12, 1079–1088. <https://doi.org/10.2147/CMAR.S232388>
- Wautier, J., Wautier, M.-P., 2021. Endothelial Cell Participation in Inflammatory Reaction. *International Journal of Molecular Sciences* 22, 6341. <https://doi.org/10.3390/ijms22126341>
- White, S.A., Zhang, L.S., Pasula, D.J., Yang, Y.H.C., Luciani, D.S., 2020. Bax and Bak jointly control survival and dampen the early unfolded protein response in pancreatic  $\beta$ -cells under glucolipotoxic stress. *Sci Rep* 10, 10986. <https://doi.org/10.1038/s41598-020-67755-3>
- Wiklander, O.P.B., Nordin, J.Z., O’Loughlin, A., Gustafsson, Y., Corso, G., Mäger, I., Vader, P., Lee, Y., Sork, H., Seow, Y., Heldring, N., Alvarez-Erviti, L., Smith, C.I.E., Le Blanc, K., Macchiarini, P., Jungebluth, P., Wood, M.J.A., Andaloussi, S.E., 2015. Extracellular vesicle in vivo biodistribution is determined by cell source, route of administration and targeting. *J Extracell Vesicles* 4, 26316. <https://doi.org/10.3402/jev.v4.26316>
- Wu, Y., Wang, W., Hu, W., Xu, W., Xiao, G., Nie, Q., Ouyang, K., Chen, S., 2015. MicroRNA-205 suppresses the growth of adrenocortical carcinoma SW-13 cells via targeting Bcl-2. *Oncology reports* 34. <https://doi.org/10.3892/or.2015.4295>
- Yamazaki, T., Galluzzi, L., 2022. BAX and BAK dynamics control mitochondrial DNA release during apoptosis. *Cell Death Differ* 29, 1296–1298. <https://doi.org/10.1038/s41418-022-00985-2>
- Yim, S., Malhotra, A., Veves, A., 2007. Antioxidants and CVD in diabetes: where do we stand now. *Curr Diab Rep* 7, 8–13. <https://doi.org/10.1007/s11892-007-0003-9>
- Yin, X., Xiang, T., Li, L., Su, X., Shu, X., Luo, X., Huang, J., Yuan, Y., Peng, W., Oberst, M., Kelly, K., Ren, G., Tao, Q., 2013. DACT1, an antagonist to Wnt/ $\beta$ -catenin signaling, suppresses tumor cell growth and is frequently silenced in breast cancer. *Breast Cancer Res* 15, R23. <https://doi.org/10.1186/bcr3399>
- Yu, C.-Y., Yang, C.-Y., Rui, Z.-L., 2019. MicroRNA-125b-5p improves pancreatic  $\beta$ -cell function through inhibiting JNK signaling pathway by targeting DACT1 in



- mice with type 2 diabetes mellitus. *Life Sci* 224, 67–75. <https://doi.org/10.1016/j.lfs.2019.01.031>
- Zhang, B., Mao, S., Liu, X., Li, S., Zhou, H., Gu, Y., Liu, W., Fu, L., Liao, C., Wang, P., 2021. MiR-125b inhibits cardiomyocyte apoptosis by targeting BAK1 in heart failure. *Mol Med* 27, 72. <https://doi.org/10.1186/s10020-021-00328-w>
- Zhao, Q., Liu, H., Yao, C., Shuai, J., Sun, X., 2016. Effect of Dynamic Interaction between microRNA and Transcription Factor on Gene Expression. *Biomed Res Int* 2016, 2676282. <https://doi.org/10.1155/2016/2676282>
- Zhu, K., Jiang, B., Yang, Y., Hu, R., Liu, Z., 2017. DACT1 overexpression inhibits proliferation, enhances apoptosis, and increases daunorubicin chemosensitivity in KG-1 $\alpha$  cells. *Tumour Biol* 39, 1010428317711089. <https://doi.org/10.1177/1010428317711089>