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12. Lundy SD, Zhu W-Z, Regnier M, Laflamme MA. Structural and functional maturation of cardiomyocytes derived from human pluripotent stem cells. *Stem Cells Dev* 2013;22:1991-2002.
  13. Kamakura T, Makiyama T, Sasaki K, Yoshida Y, Wuriyanghai Y, Chen J, et al. Ultrastructural maturation of human-induced pluripotent stem cell-derived cardiomyocytes in a long-term culture. *Circ J* 2013;77:1307-14.
  14. Beauchamp P, Moritz W, Kelm JM, Ullrich ND, Agarkova I, Anson B, et al. Development and characterization of a scaffold-free 3D spheroid model of iPSC-derived human cardiomyocytes. *Tissue Eng Part C Methods* 2015;21:852-61.
  15. Chiusa M, Hool S-L, Truetsch P, Djafarzadeh S, Jakob SM, Seifriz F, et al. Cancer therapy modulates VEGF signaling and viability in adult rat cardiac microvascular endothelial cells and cardiomyocytes. *J Mol Cell Cardiol* 2012;52:1164-75.
  16. Kim HD. Expression of intermediate filament desmin and vimentin in the human fetal heart. *Anat Rec* 1996;246:271-8.
  17. Pentassuglia L, Timolati F, Seifriz F, Abudukadier K, Suter TM, Zuppinger C. Inhibition of ErbB2/neuregulin signaling augments paclitaxel-induced cardiotoxicity in adult ventricular myocytes. *Exp Cell Res* 2007;313:1588-601.
  18. Zuppinger C, Schaub MC, Eppenberger HM. Dynamics of early contact formation in cultured adult rat cardiomyocytes studied by N-cadherin fused to green fluorescent protein. *J Mol Cell Cardiol* 2000;32:539-55.
  19. Vermij, Abriel H, van Veen TA. Refining the molecular organization of the cardiac intercalated disc. *Cardiovasc Res* 2016;113:1-32.
  20. Brancaccio M, Hirsch E, Notte A, Selvetella G, Lembo G, Tarone G. Integrin signalling: the tug-of-war in heart hypertrophy. *Cardiovasc Res* 2006;70(3):422-33.
  21. Hong T, Yang H, Zhang S-S, Cho HC, Kalashnikova M, Sun B, et al. Cardiac BIN1 folds T-tubule membrane, controlling ion flux and limiting arrhythmia. *Nature Research* 2014;20(6):624-32.
  22. Munro ML, Jayasinghe ID, Wang Q, Quick A, Wang W, Baddeley D, et al. Junctophilin-2 in the nanoscale organisation and functional signalling of ryanodine receptor clusters in cardiomyocytes. *J Cell Sci* 2016;129:4388-98.
  23. Ibrahim M, Siedlecka U, Buyandelger B, Harada M, Rao C, Moshkov A, et al. A critical role for Telethonin in regulating t-tubule structure and function in the mammalian heart. *Hum Mol Genet* 2013;22:372-83.
  24. Knöll R, Linke WA, Zou P, Miocic S, Kostin S, Buyandelger B, et al. Telethonin deficiency is associated with maladaptation to biomechanical stress in the mammalian heart. *Circ Res* 2011;109:758-69.
  25. Bang ML, Mudry RE, McElhinny AS, Trombitás K, Geach DJ, Yamasaki R, et al. Myopalladin, a novel 145-kilodalton sarcomeric protein with multiple roles in Z-disc and I-band protein assemblies. *J Cell Biol* 2001;153:413-27.
  26. Zhong H, Chiusa M, Cadar A, Lin A, Sarantis S, Davidson JM, et al. Targeted inhibition of ANKRD1 disrupts sarcomeric ERK-GATA4 signal transduction and abrogates phenylephrine-induced cardiomyocyte hypertrophy. *Cardiovasc Res* 2015;106:261-71.
  27. Bedada FB, Chan SS-K, Metzger SK, Zhang L, Zhang J, Garry DJ, et al. Acquisition of a quantitative, stoichiometrically conserved ratiometric marker of maturation status in stem cell-derived cardiac myocytes. *Stem Cell Rep* 2014;3:594-605.
  28. Black FM, Packer SE, Parker TG, Michael LH, Roberts R, Schwartz RJ, et al. The vascular smooth muscle alpha-actin gene is reactivated during cardiac hypertrophy provoked by load. *J Clin Invest* 1991;88:1581-8.
  29. Agarkova I, Auerbach D, Ehler E, Perriard JC. A novel marker for vertebrate embryonic heart, the EHMymesin isoform. *J Biol Chem* 2000;275:10256-64.
  30. Vinkemeier U, Obermann W, Weber K, Fürst DO. The globular head domain of titin extends into the center of the sarcomeric M band. cDNA cloning, epitope mapping and immunoelectron microscopy of two titin-associated proteins. *J Cell Sci* 1993;106:319-30.
  31. Knollmann BC. Induced pluripotent stem cell-derived cardiomyocytes: boutique science or valuable arrhythmia model? *Circ Res* 2013 Mar 15;112:969-76.
  32. Ehler E. Cardiac cytoarchitecture - why the "hardware" is important for heart function! *Biochim Biophys Acta* 2016;1863:1857-63.
  33. Jin J-P, Zhang Z, Bautista JA. Isoform diversity, regulation, and functional adaptation of troponin and calponin. *Crit Rev Eukaryot Gene Expr* 2008;18:93-124.
  34. Zolk O, Frohme M, Maurer A, Kluxen F-W, Hentsch B, Zubakov D, et al. Cardiac ankyrin repeat protein, a negative regulator of cardiac gene expression, is augmented in human heart failure. *Biochem Biophys Res Commun* 2002;293:1377-82.
  35. Mason P, Bayol S, Loughna PT. The novel sarcomeric protein telethonin exhibits developmental and functional regulation. *Biochem Biophys Res Commun* 1999;257:699-703.
  36. Hirschy A, Schatzmann F, Ehler E, Perriard J-C. Establishment of cardiac cytoarchitecture in the developing mouse heart. *Dev Biol* 2006;289:430-41.