Genes selected for checking.

	Why these genes are selected?	Pathway	References
Rkip	• In the pancreas, localizes specifically in the islets • Controls beta cell proliferation • RKIP binds to Raf-1, leading to the blockage of Mek and Erk activation • Tungstate activates the classical MAPK pathway (Ras->Raf->Mek->Erk) in hepatocytes	MAPK p42/44	• Surgery 136:708-715 • J Biol Chem 278:42785-42794
Fgf13	• Fgf13 binds to islet-brain 2, recruiting p38δ, and increasing the activity of this kinase • Tungstate increases the phosphorylation of p38 in the islets of nSTZ-rats	MAPK p38	• J Biol Chem 277:49111-49119 • Diabetologia 47:470- 477
Tspn8	• Tetraspanin 8 may exert tumor-promoting activities through an increase in cell motility and by inducing angiogenesis • STZ damage provokes a reduction in islet capillary area and severe microcirculatory disturbances within pancreatic islets		• Am J Physiol 273:E376-E382 • Cancer Res 66:7083-7094
Usag-1	• Inhibits or increases Wnt signaling depending on the context and inhibits BMP signaling • Controls the cell fate of cells in the kidney, tooth and hair • Wnt and BMP signaling have been demonstrated to be essential for the development and regeneration of the pancreas	Wnt BMP	• Development. 130:4295-305 • Cytokine Growth Factor Rev. 16:309-17 • Kidney Int. 73:181-91 • Science. 309:2067-70 • Proc Natl Acad Sci U S A. 102:14653-8 • Proc Natl Acad Sci U S A. 104:6247-52 • BMC Dev Biol. 7:4 • Gastroenterology. 134:544-55 • J Cell Sci. 115:753-60
Tgfb3	• Controls epithelial mesenchymal transformation, mesenchymal proliferation and angiogenesis during mouse palate development • Regulates neuron differentiation and blood-testis barrier dynamics through the Sertoli junctions • Other members of the TGF family have biological activities that also control adhesion, proliferation, and differentiation, which are important processes for pancreas regeneration	Tgf-beta	• Plast Reconstr Surg 108:938-948 • J Cell Biol. 163:1291-301 • Birth Defects Res A Clin Mol Teratol. 73:956-65 • Stem Cells. 24:2120-9 • Biol Reprod. 68:1597-612 • Annu Rev Biochem. 67:753-91 • Science 306:2261-2264 • Mol. Endocrinol 21:1467-477
Xbp1	• Key role in the unfolded protein response • Xbp1 knockout animals display abnormalities exclusively in secretory organs such as exocrine pancreas which lead to early postnatal lethality	UPR (Unfolding protein response)	• Mol Cell Biol 23:7448-7459 • EMBO J 24:4368-80
Sel1h	• Present in the acini and the islet in the pancreas • Implicated in beta-cell growth • Inhibits Notch pathway • Can modulate the TGFbeta pathway • Both pathways, TGFbeta and Notch pathway, can control the cell fate and are essential for the pancreas development	UPR (Unfolding protein response) Notch Tgf-beta	• Oncogene 22:6359-68 • DNA Cell Biol. 23:510-518 • FEBS Lett. 581:5355-60 • Res Commun Mol Pathol Pharmacol. 102:265-72 • Am J Pathol 169:1206-1214