

Supplementary Materials: Pancreatic Transdifferentiation and Glucose-Regulated Production of Human Insulin in the H4IIE Rat Liver Cell Line

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Table S1. Oligonucleotide primers for RT-PCR and real-time RT-qPCR analysis.

Gene	Forward Primer (5'–3')	Reverse Primer (5'–3')
NEUROGEN3	CCGGATGACGCCAAACTTACA	ACACCAGTGCTCCCGGGAG
PAX6	AAGAGTGGCGACTCCAGAAGTTG	ACCACACCTGTATCCTTGCTTCAGG
NKX2.2	CACGCAGGTCAAGATCTG	TGCCCCCTGGAAGGTGGCG
NKX6.1	ATGGGAAGAGAAAACACACCAGAC	TAATCGTCGTCGCTCCTCGTTC
β-ACTIN	CGTAAAGACCTCTATGCCAA	AGCCATGCCAAATGTCTCAT
PDX1	AAACGCCACACAAGGAGAAC	CTGTTATGGGACCGCTCAAG
RAT INSULIN 1	ATGGCCCTGTGGATGCGCTT	TAGTTGCAGTAGTTCTCCAGCT
RAT INSULIN 2	ATGGCCCGTGGGATCCGCTT	TGCCAAGGTCTGAAGGTCAC
NEUROD 1	GGACTTCTTGCCCTGAGCAGA	AACTCGGTGGATGGTTCGTGT
INS-FUR	AGCCTTTGTGAACCAACACC	CCAGTTGGTAGAGGGAGCAG
PC1	AATCCTGTAGGCACCTGGAC	GGAGTTTTTGGGTACCAGGA
PC2	GAGAGGAGACCTGAACATCA	CTTCGGCCACGTTCAAGTCTA
P48	GTCCTGGAGCATTTTCCCG	CTGAGGAACCTTACCTCCGC
GLUT2	GACACCCCACTCATAGTCACA	CAGCAATGATGAGAGCATGTG
GK	TGGATGACAGAGCCAGGATGG	ACTTCTGAGCCTTCTGGGGTG
GLUCAGON	GACCGTTTACGTGGCTGG	CGGTTCTCTTGGTGTTCAAC
SOMATOSTATIN	GTTTCTGCAGAAGTCTCTGG	AGTTCTTGCAGCCAGCTTTG
PANCREATIC POLYPEPTIDE	TGAACAGAGGGCTCAATACGAAAC	AGACAGAAGGGAGGCTACAAATCC
MAF A	CGCAGGCCACCACGTGCGCTTGGAGGAG	CTGCGCTGGCGAGGGCTCCCGAGGGAAG
MAF B	CAACAGCTACCCACTAGCCA	GGCGAGTTTCTCGCACTTGA
SUR2A	GGCTCTGGGAGGCTCT	CATGTCCGCACGAACGAACGAG
SUR2B	CCTGGAGGTTTCAGACTCTTG	GCCTTAGGAAGCAGTGTCTGTCCAT
KIR6.1	AGCCACTGACCTTGTC AAC	GGAGTCATGAATTGCACCTT
KIR6.2	CGTCACAAGCATCCACTCCT	CACCTGCATATGAATGGTGG

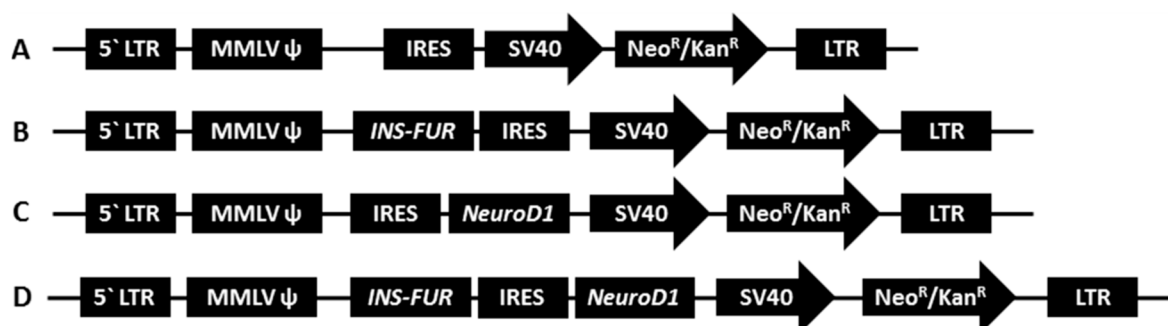


Figure S1. Schematic diagram of the vectors constructed from the retroviral vector *pLXSN* [21] used in this study. (A) *pLXSN* empty vector; (B) *pLXSN* containing *INS-FUR*; (C) *pLXSN* containing *NeuroD1*; (D) *pLXSN* containing *INS-FUR* and *NeuroD1*. LTR: long terminal repeat, Ψ: extended packaging signal, MMLV: Moloney murine leukemia virus, MCS: multi-cloning site, IRES: internal ribosomal entry site, Neo: Neomycin, Kan: Kanamycin, SV40: SV40 early promoter which controls the expression of the neomycin resistance gene.