

Table S3: List of genes differentially regulated in Pdx1^{+/-} pancreatic islets compared with Pdx1^{+/+} littermates

ELEMENT_ID	NAME	DESCRIPTION	FC	FDR
14191900	BC026682	cDNA sequence BC026682 v-maf	-5.94	0.00
14188049	Mafa	musculoaponeurotic fibrosarcoma oncogene family, protein A (avian)	-5.01	0.00
14191089	BC039632	cDNA sequence BC039632	-3.76	0.00
14185872	Slc2a2	solute carrier family 2 (facilitated glucose transporter), member 2	-2.99	0.00
14179698	6330442E10Rik	RIKEN cDNA 6330442E10 gene	-2.87	4.16
14181506	Zfp646	zinc finger protein 646 RIKEN cDNA	-2.62	0.00
14191049	6330403K07Rik	RIKEN cDNA 6330403K07 gene	-2.37	11.31
14180283	2900001G08Rik	2900001G08 gene	-2.24	5.48
14188311	Pax4	paired box gene 4 delta-like 1 homolog (Drosophila); 3- phosphoglycerate dehydrogenase	-2.13	5.48
14185220	Dlk1; Phgdh		-2.11	7.18
14184847	Unknown		-2.11	5.48
14181578	Mc3r	melanocortin 3 receptor microphthalmia- associated transcription factor	-2.06	5.48
14180967	Mitf	RIKEN cDNA	-2.05	4.16
14181418	6330403K07Rik	6330403K07 gene transient receptor potential cation channel, subfamily M, member 8	-2.01	7.18
14179129	Trpm8	low density lipoprotein receptor-related protein 2	-1.99	5.48
14186474	Lrp2	3-phosphoglycerate dehydrogenase	-1.92	5.48
14179711	Phgdh		-1.90	8.77
14183414	Foxb1	forkhead box B1 SRY-box containing gene	-1.88	5.48
14178517	Sox15	15	-1.87	5.48
14187019	Gap43	growth associated protein	-1.86	5.48

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14189126	IMAGE=5661578		-1.85	5.48
14188529	Ucn3	urocortin 3	-1.84	7.18
14178900	Itpkb	inositol 1,4,5- trisphosphate 3-kinase B one cut domain, family	-1.84	0.00
14181579	Onecut2	member 2	-1.83	5.48
14181652	Nnat	neuronatin	-1.83	5.48
14190555	Ppp1r1a	protein phosphatase 1, regulatory (inhibitor) subunit 1A	-1.82	5.48
14188660	Ints5	integrator complex subunit 5	-1.81	0.00
14182695	Ero1lb	ERO1-like beta (S. cerevisiae)	-1.80	5.48
14191687	Rbp4	retinol binding protein 4, plasma	-1.80	4.16
14189425	Ero1lb	ERO1-like beta (S. cerevisiae)	-1.80	11.31
14187757	Gng12	guanine nucleotide binding protein (G protein), gamma 12	-1.79	5.48
14180449	Psmc1	protease (prosome, macropain) 26S subunit, ATPase 1	-1.78	0.00
14186455	Ndufs2	NADH dehydrogenase (ubiquinone) Fe-S protein 2	-1.77	5.48
14178610	Ctrl	chymotrypsin-like procollagen, type VI,	-1.77	14.73
14190079	Col6a3	alpha 3	-1.75	11.31
14187356	Hspb7	heat shock protein family, member 7 (cardiovascular)	-1.74	0.00
14180998	Lrrc49	leucine rich repeat containing 49	-1.74	18.15
14185131	Unknown		-1.74	18.15
14182714	Npy	neuropeptide Y	-1.74	6.33
14181033	Slc37a4	solute carrier family 37 (glycerol-6-phosphate transporter), member 4	-1.74	5.48
14183135	Rbp4	retinol binding protein 4, plasma	-1.73	0.00
14182750	Rnase4	ribonuclease, RNase A family 4	-1.72	5.48
14189523	Papss2	3'-phosphoadenosine 5'-	-1.70	7.18

		phosphosulfate synthase 2		
14184401	Rhobtb1	Rho-related BTB domain containing 1	-1.69	7.18
14191108	Unknown		-1.68	0.00
14187545	Rnase4	ribonuclease, RNase A family 4	-1.68	5.48
14180691	Gja1	gap junction membrane channel protein alpha 1	-1.66	8.77
14190759	Pax7	paired box gene 7	-1.65	5.48
14182692	Fbxl17	F-box and leucine-rich repeat protein 17	-1.62	5.48
14181298	Dhrs4	dehydrogenase/reductase (SDR family) member 4	-1.60	6.33
14180966	Irs2	insulin receptor substrate 2	-1.58	4.16
14180600	4932416N17Rik	RIKEN cDNA 4932416N17 gene	-1.58	6.33
14186900	Ctrb1	chymotrypsinogen B1	-1.57	8.77
14188095	Creg1	cellular repressor of E1A- stimulated genes 1	-1.57	4.16
14186593	Cel	carboxyl ester lipase	-1.57	8.77
14179210	Gng12	guanine nucleotide binding protein (G protein), gamma 12	-1.57	6.33
14183312	IMAGE=5679208		-1.57	7.18
14189040	Ctrb1	chymotrypsinogen B1	-1.56	11.31
14178664	Cbs	cystathionine beta- synthase	-1.56	18.15
14185871	Slit3	slit homolog 3 (Drosophila)	-1.55	5.48
14183698	Mmp2	matrix metalloproteinase 2 tubulin-specific	-1.55	11.31
14179490	Tbcd	chaperone d	-1.55	5.48
14188304	Insl3	insulin-like 3	-1.54	5.48
14181684	Ftl1	ferritin light chain 1	-1.54	11.31
14190109	Prkcb1	protein kinase C, beta 1	-1.54	5.48
14183539	Phgdh	3-phosphoglycerate dehydrogenase	-1.53	18.15
14178921	Arl4c	ADP-ribosylation factor- like 4C	-1.52	5.48
14182276	Ctrb1	chymotrypsinogen B1	-1.51	14.73
14191953	Rtn3	reticulon 3	-1.50	8.77
14183416	Atp2a3	ATPase, Ca ⁺⁺ transporting, ubiquitous	-1.50	4.16
14185649	Pard6g	par-6 partitioning	-1.50	11.31

14184987	IMAGE=6430730	defective 6 homolog gamma (C. elegans)	-1.50	5.48
14189328	Xlkd1	extra cellular link domain- containing 1	-1.49	5.48
14180408	Ins1	insulin I	-1.49	5.48
14180867	Rhobtb1	Rho-related BTB domain containing 1	-1.49	5.48
14190425	Hadh; Slc39a5	hydroxyacyl-Coenzyme A dehydrogenase; solute carrier family 39 (metal ion transporter), member 5	-1.48	8.77
14182100	Rbp4	retinol binding protein 4, plasma OCIA domain containing 2	-1.48	7.18
14188837	Ociad2	2	-1.48	5.48
14182061	Setd5	SET domain containing 5	-1.48	5.48
14186314	Adora1	adenosine A1 receptor	-1.47	5.48
14190776	IMAGE=6430091		-1.47	5.48
14182093	Myo1b	myosin IB	-1.47	11.31
14185348	Prlr	prolactin receptor	-1.47	5.48
14185863	Pgr	progesterone receptor cytoplasmic polyadenylation element binding protein 1	-1.47	5.48
14180031	Cpeb1	adenylate cyclase	-1.47	5.48
14180280	Adcyap1	activating polypeptide 1	-1.46	11.31
14190974	Cdkn1c	cyclin-dependent kinase inhibitor 1C (P57)	-1.46	5.48
14191697	Hadh	hydroxyacyl-Coenzyme A dehydrogenase angiogenin, ribonuclease A family, member 1	-1.46	18.15
14180958	Ang1	A family, member 1	-1.46	7.18
14178543	Ela2a	elastase 2A	-1.45	8.77
14190500	Ela1	elastase 1, pancreatic	-1.45	12.79
14182673	IMAGE=5682532		-1.45	5.48
14178498	Npc2	Niemann Pick type C2 similar to hypothetical protein FLJ12895	-1.45	8.77
14190818	LOC232875	protein FLJ12895	-1.45	5.48
14182470	Pcx	pyruvate carboxylase	-1.45	7.18
14181317	Tor2a	torsin family 2, member A	-1.45	6.33
14179049	IMAGE=5669426		-1.44	5.48
14189144	Aldh1l2	aldehyde dehydrogenase 1 family, member L2	-1.43	5.48
14181043	Ftl1	ferritin light chain 1	-1.43	5.48

		NADH dehydrogenase subunit 1; NADH dehydrogenase subunit 2; immature colon		
14179707	ND1; ND2; Ict1	carcinoma transcript 1	-1.43	7.18
14190604	Rab6	RAB6, member RAS oncogene family	-1.43	5.48
14186728	Sars	seryl-aminoacyl-tRNA synthetase	-1.43	12.79
14184134	IMAGE=6433796		-1.43	14.73
14184027	Gpbar1	G protein-coupled bile acid receptor 1	-1.43	5.48
14187879	Tgfa	transforming growth factor alpha	-1.42	5.48
14180435	Ins2	insulin II	-1.42	5.48
14191274	Adarb1	adenosine deaminase, RNA-specific, B1	-1.42	5.48
14186196	Cd63	Cd63 antigen	-1.42	7.18
14180644	Arl15	ADP-ribosylation factor-like 15	-1.41	5.48
14189733	Rtn4	reticulon 4	-1.41	5.48
14188922	Trim54	tripartite motif-containing 54	-1.41	6.33
14180953	Ddit3	DNA-damage inducible transcript 3	-1.40	5.48
14186141	Sars	seryl-aminoacyl-tRNA synthetase	-1.40	14.73
14182878	Lrp1rc	leucine-rich PPR-motif containing	1.40	4.22
14182649	Ncam1	neural cell adhesion molecule 1	1.40	3.62
14189991	Col4a2	procollagen, type IV, alpha 2	1.40	6.33
14190162	AW046287	expressed sequence AW046287	1.40	11.31
14183873	Kcnk1	potassium channel, subfamily K, member 1	1.41	3.71
14181520	Irf1	interferon regulatory factor 1	1.41	4.22
14187150	Gpx2	glutathione peroxidase 2	1.41	5.26
14183476	Chga	chromogranin A	1.41	12.79
14183049	Dck	deoxycytidine kinase	1.41	5.06
14185326	Pgam1	phosphoglycerate mutase 1	1.42	3.21
14189752	Peci	peroxisomal delta3, delta2-enoyl-Coenzyme A	1.42	7.18

		isomerase		
14184982	Tmcc3	transmembrane and coiled coil domains 3 isopentenyl-diphosphate	1.42	3.71
14190408	Idi1	delta isomerase	1.42	6.33
14189478	Sdcbp	syndecan binding protein Josephin domain	1.43	14.73
14185381	Josd3	containing 3 sine oculis-related	1.43	12.79
14181896	Six4	homeobox 4 homolog (Drosophila)	1.44	5.26
14188295	Cnot6l	CCR4-NOT transcription complex, subunit 6-like	1.44	18.15
14191578	Man2a1	mannosidase 2, alpha 1	1.44	3.21
14185678	Rbbp7	retinoblastoma binding protein 7	1.45	14.73
14179995	Ggcx	gamma-glutamyl carboxylase	1.45	3.62
14181538	Fgf1	fibroblast growth factor 1	1.45	12.79
14178621	Cd81	CD 81 antigen	1.45	8.77
14191521	Gnas	GNAS (guanine nucleotide binding protein, alpha stimulating) complex locus	1.45	12.79
14186923	Ucp2	uncoupling protein 2 (mitochondrial, proton carrier)	1.46	14.73
14189926	Tagln2	transgelin 2	1.46	3.87
14183000	Slc29a1	solute carrier family 29 (nucleoside transporters), member 1	1.46	3.71
14192096	Cd81	CD 81 antigen	1.46	14.73
14191414	Mef2c	myocyte enhancer factor 2C	1.46	8.77
14183322	Plvap	plasmalemma vesicle associated protein	1.47	18.15
14179648	IMAGE=5945372		1.47	14.73
14179774	Scg5	secretogranin V	1.47	8.77
14187928	Uox	urate oxidase	1.47	7.18
14188583	Anxa11	annexin A11	1.47	3.71
14191817	Ssr3	signal sequence receptor, gamma	1.48	14.73
14181221	Dnaja4	DnaJ (Hsp40) homolog, subfamily A, member 4	1.49	8.77
14187048	Gnas	GNAS (guanine nucleotide binding	1.49	12.79

		protein, alpha stimulating) complex locus		
14179141	Resp18	regulated endocrine- specific protein 18	1.49	3.71
14187746	Btbd7	BTB (POZ) domain containing 7	1.50	5.06
14187959	Adamts1	a disintegrin-like and metallopeptidase (reprolysin type) with thrombospondin type 1 motif, 1	1.51	18.15
14191627	Egr1	early growth response 1	1.52	14.73
14181508	Gnas; Gm1568	GNAS (guanine nucleotide binding protein, alpha stimulating) complex locus; gene model 1568, (NCBI)	1.52	12.79
14191969	Abcb4	ATP-binding cassette, sub-family B (MDR/TAP), member 4	1.53	5.06
14190798	Lgals3bp	lectin, galactoside- binding, soluble, 3 binding protein	1.53	3.21
14189191	Serpina1c	serine (or cysteine) peptidase inhibitor, clade A, member 1c	1.54	6.33
14188662	Pgrmc1	progesterone receptor membrane component 1	1.54	14.73
14180415	1810073N04Rik	RIKEN cDNA 1810073N04 gene	1.55	3.71
14187139	Serping1	serine (or cysteine) peptidase inhibitor, clade G, member 1	1.56	14.73
14180338	Aip	aryl-hydrocarbon receptor-interacting protein	1.56	3.71
14185181	Lgals3bp	lectin, galactoside- binding, soluble, 3 binding protein	1.57	3.87
14183645	Slc29a1	solute carrier family 29 (nucleoside transporters), member 1	1.58	3.71
14184879	Tagln3	transgelin 3	1.60	18.15
14182031	Scn2b	sodium channel, voltage- gated, type II, beta	1.61	3.21
14184008	Pfkfb3	6-phosphofructo-2-	1.61	3.21

		kinase/fructose-2,6- biphosphatase 3		
14187404	Tgfr3	transforming growth factor, beta receptor III	1.61	3.71
14181589	G6pc	glucose-6-phosphatase, catalytic	1.62	5.06
14180080	Hist1h1c	histone cluster 1, H1c	1.63	3.71
14185091	Myh10	myosin, heavy polypeptide 10, non- muscle	1.63	3.62
14184698	5730509K17Rik	RIKEN cDNA 5730509K17 gene	1.63	3.21
14189992	Maged2	melanoma antigen, family D, 2	1.64	5.06
14183703	Prss23	protease, serine, 23	1.65	3.21
14180042	GENBANK=CF622970			1.65 6.33
14191241	Fxyd6	FXYD domain-containing ion transport regulator 6	1.66	3.71
14186461	Gdf10	growth differentiation factor 10	1.66	12.79
14182612	Scg2	secretogranin II	1.66	14.73
14190219	Gc	group specific component	1.67	3.71
14181397	Vtn	vitronectin	1.67	5.26
14185932	Gucy2c	guanylate cyclase 2c cysteine-rich with EGF- like domains 2	1.67	3.87
14187738	Creld2		1.70	4.22
14182491	Rpl17	ribosomal protein L17	1.70	3.62
14190598	Anxa4	annexin A4	1.73	3.71
14189803	Icam1	intercellular adhesion molecule	1.73	3.21
14190016	5330417C22Rik	RIKEN cDNA 5330417C22 gene	1.73	3.71
14177944	Tspan33	tetraspanin 33	1.74	3.21
14190800	Man1a	mannosidase 1, alpha	1.75	3.21
14187691	Ace2	angiotensin I converting enzyme (peptidyl- dipeptidase A) 2	1.75	3.87
14179442	Pim2	proviral integration site 2	1.76	3.21
14179424	Fhl2	four and a half LIM domains 2	1.76	3.62
14179446	Prss23	protease, serine, 23	1.77	3.21
14182933	Gnas	GNAS (guanine nucleotide binding protein, alpha stimulating) complex locus	1.77	4.22
14186619	Rpa1	replication protein A1	1.78	3.62

14179209	Txnip	thioredoxin interacting protein	1.82	12.79
14185635	Cd44	CD44 antigen	1.88	3.71
14190981	Hap1	huntingtin-associated protein 1	1.90	3.71
14178468	Sult1d1	sulfotransferase family 1D, member 1	1.94	12.79
14191453	Pgf	placental growth factor	1.94	3.62
14192544	Cfh	complement component factor h	1.97	14.73
14178946	Arrdc4	arrestin domain containing 4	1.98	5.26
14185546	Dach2	dachshund 2 (Drosophila)	1.98	3.21
14192312	2700008G24Rik	RIKEN cDNA 2700008G24 gene	1.99	11.31
14182476	Fxyd3	FXYD domain-containing ion transport regulator 3	2.00	3.87
14187627	Sez6l	seizure related 6 homolog like	2.02	3.71
14181180	Fxyd3	FXYD domain-containing ion transport regulator 3	2.02	3.87
14188866	Klf10	Kruppel-like factor 10	2.02	3.71
14182643	Chgb	chromogranin B	2.05	3.62
14185758	Fxyd3	FXYD domain-containing ion transport regulator 3	2.08	5.06
14180899	Tagln3	transgelin 3	2.09	14.73
14180296	Txnip	thioredoxin interacting protein	2.21	5.26
14178816	Neurog3	neurogenin 3	2.22	3.21
14184569	Arhgef2	rho/rac guanine nucleotide exchange factor (GEF) 2	2.34	3.21
14183973	Cd81	CD 81 antigen	2.34	3.71
14188381	Tmem27	transmembrane protein 27	2.46	3.62
14188629	Ace2	angiotensin I converting enzyme (peptidyl-dipeptidase A) 2	2.55	3.62
14188321	Pyy	peptide YY	2.59	6.33
14192234	Tspan8	tetraspanin 8	2.62	3.21
14188316	Neurog3	neurogenin 3	2.90	0.00
14191154	Ghrl	ghrelin	3.34	3.71
14188814	Igk-C	immunoglobulin kappa chain, constant region	4.35	4.22
14179056	Cpb2	carboxypeptidase B2 (plasma)	5.16	0.00

14186398	Igh-VJ558	immunoglobulin heavy chain (J558 family)	6.21	3.87
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