

Table 1s**Further characterisation of T1D patients and relatives who were autoantibody positive**

T1D patients		
Sex	Age (years)	Autoantibody status
F	3	IAA
F	5	IAA, IA-2A
F	5	IAA, IA-2A
F	14	IA-2A, GADA
F	13	IA-2A, GADA
F	15	GADA
M	4	IA-2A
M	7	IA-2A
M	13	IA-2A, GADA
M	14	IA-2A, GADA
M	14	IA-2A, GADA
M	41	GADA
Relatives		
F	3	IAA
F	21	IA-2A, GADA
M	3	IAA, IA-2A
M	4	IA-2A, GADA
M	5	IA-2A
M	5	IA-2A, GADA
M	7	IA-2A, GADA
M	8	IA-2A, GADA
M	10	IA-2A, GADA

Table 2s

Top twenty up- or downregulated genes for each comparison

UPREGULATED First group is always upregulated in comparison do the other one.			
Entrez_Gene_Description	Entrez_Gene_Name	Fold_change	P_Value
DV vs D			
renin	<i>REN</i>	2.177	0.002
melanoma antigen, family C, 1	<i>MAGEC1</i>	2.001	0.002
glycoprotein hormone beta 5	<i>GPHB5</i>	1.918	0.000
relaxin 3 receptor 1	<i>RLN3R1</i>	1.866	0.000
homeo box (H6 family) 3	<i>HMX3</i>	1.832	0.001
tripartite motif-containing 67	<i>TRIM67</i>	1.817	0.000
zinc finger protein 560	<i>ZNF560</i>	1.814	0.000
carboxypeptidase E	<i>CPE</i>	1.813	0.001
DKFZP434A062 protein	<i>DKFZP434A062</i>	1.809	0.001
late cornified envelope 2B	<i>LCE2B</i>	1.798	0.000
cholinergic receptor, nicotinic, gamma polypeptide	<i>CHRNG</i>	1.789	0.001
phosphatidylinositol-specific phospholipase C, X domain containing 2	<i>PLCXD2</i>	1.722	0.002
dystrophin related protein 2	<i>DRP2</i>	1.708	0.001
polycystic kidney disease 1-like 2	<i>PKD1L2</i>	1.702	0.001
ATP-binding cassette, sub-family A (ABC1), member 4	<i>ABCA4</i>	1.693	0.001
similar to developmental pluripotency associated 5; embryonal stem cell specific gene 1	<i>LOC340168</i>	1.689	0.001
similar to precursor peptide	<i>LOC340204</i>	1.685	0.001
growth differentiation factor 8	<i>GDF8</i>	1.677	0.000
similar to RIKEN cDNA 2410004A20	<i>LOC154288</i>	1.666	0.001
similar to Pregnancy specific beta-1-glycoprotein 4, isoform 1	<i>LOC440534</i>	1.635	0.001
DRLvs DV			
ATPase, (Na+)/K+ transporting, beta 4 polypeptide	<i>ATP1B4</i>	1.935	0.001

scavenger receptor cysteine rich domain containing, group B (4 domains)	<i>SRCRB4D</i>	1.893	0.000
dynein, axonemal, heavy polypeptide 8	<i>DNAH8</i>	1.732	0.001
programmed cell death 2	<i>PDCD2</i>	1.681	0.003
aldo-keto reductase family 1, member C-like 1	<i>AKR1CL1</i>	1.664	0.001
integrin, alpha 10	<i>ITGA10</i>	1.638	0.000
chromosome 10 open reading frame 92	<i>C10orf92</i>	1.622	0.002
chromosome 8 open reading frame 15	<i>C8orf15</i>	1.583	0.004
C1q and tumor necrosis factor related protein 3	<i>C1QTNF3</i>	1.549	0.003
F-box and leucine-rich repeat protein 14	<i>FBXL14</i>	1.519	0.002
CD5 antigen-like (scavenger receptor cysteine rich family)	<i>CD5L</i>	1.502	0.002
tripartite motif-containing 55	<i>TRIM55</i>	1.473	0.004
H2A histone family, member J	<i>H2AFJ</i>	1.459	0.002
parathyroid hormone	<i>PTH</i>	1.456	0.003
chromosome 21 open reading frame 13	<i>C21orf13</i>	1.426	0.005
similar to sphingomyelin phosphodiesterase 3, neutral membrane	<i>LOC392275</i>	1.423	0.003
serologically defined colon cancer antigen 33	<i>SDCCAG33</i>	1.387	0.002
minor histocompatibility antigen HA-1	<i>HA-1</i>	1.380	0.001
dual specificity phosphatase 8	<i>DUSP8</i>	1.365	0.001
proprotein convertase subtilisin/kexin type 5	<i>PCSK5</i>	1.361	0.003
DRLvs D			
kelch domain containing 4	<i>KLHDC4</i>	1.586	0.000
growth differentiation factor 8	<i>GDF8</i>	1.673	0.000
similar to precursor peptide	<i>LOC340204</i>	1.815	0.000
glial fibrillary acidic protein	<i>GFAP</i>	1.911	0.000
cholinergic receptor, nicotinic, gamma polypeptide	<i>CHRNG</i>	1.921	0.000
hepatocyte nuclear factor 4, alpha	<i>HNF4A</i>	1.499	0.000
colipase, pancreatic	<i>CLPS</i>	1.799	0.000
chromosome 11 open reading frame 33	<i>C11orf33</i>	1.565	0.000
crystallin, gamma D	<i>CRYGD</i>	1.635	0.000
MEGF11 protein	<i>MEGF11</i>	1.519	0.000
FLJ16237 protein	<i>FLJ16237</i>	1.656	0.000

serine (or cysteine) proteinase inhibitor, clade B (ovalbumin), member 2	<i>SERPINB2</i>	2.368	0.000
a disintegrin-like and metalloprotease (reprolysin type) with thrombospondin type 1 motif, 19	<i>ADAMTS19</i>	1.690	0.001
gap junction protein, alpha 10, 59kDa	<i>GJA10</i>	1.682	0.001
folate receptor 2 (fetal)	<i>FOLR2</i>	2.623	0.001
relaxin 3 receptor 1	<i>RLN3R1</i>	1.708	0.001
transient receptor potential cation channel, subfamily C, member 6	<i>TRPC6</i>	1.484	0.001
GCIP-interacting protein p29	<i>P29</i>	1.572	0.001
NADH:ubiquinone oxidoreductase MLRQ subunit homolog	<i>LOC56901</i>	1.384	0.001
chemokine (C-X-C motif) ligand 1 (melanoma growth stimulating activity, alpha)	<i>CXCL1</i>	1.816	0.001

DOWNREGULATED			
First group is always downregulated in comparison do the other one.			
Entrez_Gene_Description	Entrez_Gene_Name	Fold_change	P_Value
DV vs D			
solute carrier family 7 (cationic amino acid transporter, y+ system), member 3	<i>SLC7A3</i>	0.464	0.002
transient receptor potential cation channel, subfamily V, member 3	<i>TRPV3</i>	0.472	0.005
ring finger protein 144	<i>RNF144</i>	0.484	0.001
collagen, type XVI, alpha 1	<i>COL16A1</i>	0.543	0.004
CD4 antigen (p55)	<i>CD4</i>	0.557	0.002
LOC441491	<i>LOC441491</i>	0.562	0.006
glomulin, FKBP associated protein	<i>GLMN</i>	0.586	0.006
tumor susceptibility gene 101	<i>TSG101</i>	0.590	0.005
chromosome 6 open reading frame 122	<i>C6orf122</i>	0.596	0.006
kinesin family member 27	<i>KIF27</i>	0.599	0.002
ankyrin repeat and KH domain containing 1	<i>ANKHD1</i>	0.600	0.003
keratin associated protein 4-5	<i>KRTAP4-5</i>	0.607	0.003
myotubularin related protein 7	<i>MTMR7</i>	0.648	0.003
zinc finger protein 266	<i>ZNF266</i>	0.653	0.005
FLJ42258 protein	<i>FLJ42258</i>	0.654	0.001

sarcoma antigen 1	<i>SAGE1</i>	0.658	0.002
chromosome 20 open reading frame 23	<i>C20orf23</i>	0.665	0.006
cytochrome P450, family 2, subfamily R, polypeptide 1	<i>CYP2R1</i>	0.666	0.004
testis specific, 10 interacting protein	<i>TSGA10IP</i>	0.679	0.006
solute carrier family 24 (sodium/potassium/calcium exchanger), member 1	<i>SLC24A1</i>	0.680	0.006
DRLvs DV			
heparan sulfate (glucosamine) 3-O-sulfotransferase 2	<i>HS3ST2</i>	0.320	0.001
renin	<i>REN</i>	0.516	0.003
melanoma antigen, family C, 1	<i>MAGEC1</i>	0.522	0.002
KIAA1411	<i>KIAA1411</i>	0.528	0.004
deafness, autosomal dominant 5	<i>DFNA5</i>	0.530	0.001
RAB17, member RAS oncogene family	<i>RAB17</i>	0.532	0.000
tryptophan hydroxylase 2	<i>TPH2</i>	0.546	0.001
KIAA1889 protein	<i>KIAA1889</i>	0.569	0.002
chromosome 12 open reading frame 4	<i>C12orf4</i>	0.581	0.001
D21S2091E	<i>D21S2091E</i>	0.592	0.000
glutathione peroxidase 2 (gastrointestinal)	<i>GPX2</i>	0.619	0.004
tripartite motif-containing 67	<i>TRIM67</i>	0.628	0.001
myomesin (M-protein) 2, 165kDa	<i>MYOM2</i>	0.631	0.001
Jak and microtubule interacting protein 2	<i>KIAA0555</i>	0.633	0.001
zinc finger protein 560	<i>ZNF560</i>	0.635	0.000
amiloride-sensitive cation channel 1, neuronal (degenerin)	<i>ACCN1</i>	0.637	0.003
a disintegrin-like and metalloprotease (reprolysin type) with thrombospondin type 1 motif, 1	<i>ADAMTS1</i>	0.646	0.003
olfactory receptor, family 11, subfamily A, member 1	<i>OR11A1</i>	0.652	0.002
KCNQ1 downstream neighbor	<i>KCNQ1DN</i>	0.656	0.002
regulator of G-protein signalling 13	<i>RGS13</i>	0.658	0.003
DRLvs D			
heparan sulfate (glucosamine) 3-O-sulfotransferase 2	<i>HS3ST2</i>	0.280	0.000
solute carrier family 7 (cationic amino acid transporter, y+ system), member 3	<i>SLC7A3</i>	0.432	0.000
HtrA serine peptidase 4	<i>HTRA4</i>	0.436	0.000
GM2 ganglioside activator	<i>GM2A</i>	0.447	0.000
leukocyte immunoglobulin-like receptor, subfamily A (with TM domain), member 2	<i>LILRA2</i>	0.501	0.001
apolipoprotein C-I	<i>APOC1</i>	0.503	0.002
deafness, autosomal dominant 5	<i>DFNA5</i>	0.509	0.000

phosphatidic acid phosphatase type 2B	<i>PPAP2B</i>	0.525	0.001
bone morphogenetic protein 6	<i>BMP6</i>	0.530	0.002
GM2 ganglioside activator	<i>GM2A</i>	0.536	0.000
RAB17, member RAS oncogene family	<i>RAB17</i>	0.550	0.000
pleckstrin and Sec7 domain containing 3	<i>PSD3</i>	0.560	0.002
coronin, actin binding protein, 1C	<i>CORO1C</i>	0.579	0.000
vesicle amine transport protein 1 homolog (T californica)	<i>VAT1</i>	0.579	0.000
homeo box D4	<i>HOXD4</i>	0.612	0.001
sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3C	<i>SEMA3C</i>	0.613	0.001
keratin associated protein 4-5	<i>KRTAP4-5</i>	0.614	0.002
sialyltransferase 10 (alpha-2,3-sialyltransferase VI)	<i>SIAT10</i>	0.626	0.000
ferredoxin 1	<i>FDX1</i>	0.634	0.000
cytochrome P450, family 2, subfamily R, polypeptide 1	<i>CYP2R1</i>	0.641	0.001