

Gene	IFN $\lambda$ 1		IFN $\lambda$ 2		IFN $\alpha$	
	Average	SD	Average	SD	Average	SD
ADAR	2.6	1.0	2.7	2.7	4.3	2.8
ANXA11	1.1	0.1	1.3	0.3	1.0	0.4
ARL5A	0.9	0.1	0.9	0.1	0.9	0.1
ARL5B	1.3	0.1	1.2	0.5	2.6	0.7
ATF5	1.1	0.4	1.2	0.8	1.6	1.2
BAG3	0.9	0.1	1.0	0.3	0.8	0.2
BST2	5.5	0.8	8.2	3.9	16.9	11.4
CASP1	2.3	1.8	2.5	2.1	4.6	4.0
CAV1	0.8	0.2	1.1	0.2	0.7	0.4
CBFB	1.1	0.3	1.1	0.6	1.0	0.7
CD70	n.d.	-	n.d.	-	n.d.	-
CDKN1B	1.1	0.3	1.0	0.6	1.2	0.7
CNP	3.2	1.9	4.5	5.7	6.9	4.5
COL16A1	1.0	0.6	1.6	1.0	1.1	0.7
CXCL10	63.7	87.7	56.2	73.4	821.9	1149.7
DAD1	0.9	0.1	1.0	0.2	0.9	0.3
DIABLO	1.2	0.5	1.5	1.2	1.2	0.9
DNAJB2	1.0	0.2	1.3	0.5	0.8	0.2
PKR	4.3	1.5	4.3	2.1	9.6	3.0
GBP1	10.9	11.3	10.1	10.9	101.8	133.5
GBP2	2.4	2.3	2.4	2.1	8.9	11.3
GCH1	1.3	0.5	1.4	1.1	1.8	1.2
HLA-A	1.2	0.3	1.4	0.6	1.4	0.6
HLA-B	1.6	0.7	2.1	2.2	2.4	1.7
HLA-C	1.4	0.5	2.0	1.2	2.6	0.9
HLA-DOA	1.1	0.2	1.4	1.2	1.2	0.9
HLA-DQA1	1.3	0.3	1.4	0.1	1.2	1.0
HLA-E	1.6	0.7	2.3	2.1	2.3	1.6
HLA-F	2.3	1.2	3.3	2.9	4.3	2.1
HLA-G	1.6	0.7	1.6	0.3	2.0	0.3
HOXB2	1.1	0.5	1.4	1.0	1.1	1.2
HSPA1L	1.4	0.8	1.7	1.5	1.5	1.0
IFI16	5.4	3.1	5.8	2.5	11.8	0.9
IFI27	4.3	1.4	4.9	1.6	11.2	3.0
IFI30	1.6	0.5	1.7	1.1	2.4	1.8
IFI6	4.5	1.7	4.7	2.5	8.3	4.2
IFIT1	34.3	16.3	32.1	19.5	100.0	35.5
IFIT3	42.0	35.4	42.3	30.6	130.3	33.0
IFITM1	6.6	3.4	8.2	2.5	12.9	7.4
IFITM2	2.3	1.7	2.8	2.2	5.0	4.8
IFNA1	n.d.	-	n.d.	-	n.d.	-
IFNA2	n.d.	-	n.d.	-	n.d.	-
IFNA4	n.d.	-	n.d.	-	n.d.	-
IFNAR1	0.8	0.2	0.7	0.3	0.6	0.3
IFNAR2	1.0	0.1	1.0	0.2	1.1	0.2
IFNB1	n.d.	-	n.d.	-	n.d.	-
IRF1	3.3	2.5	5.1	6.9	8.9	7.1
IRF2	1.3	0.1	1.5	0.5	2.9	1.4
IRF3	1.0	0.1	1.2	0.1	0.9	0.0
IRF5	1.6	1.2	1.9	2.1	1.1	0.9
IRF7	10.1	3.7	12.9	12.5	20.6	13.4
IRF9	7.7	7.0	8.0	8.0	6.7	4.6
ISG15	58.5	28.3	80.7	48.6	300.4	123.4
ISG20	5.0	2.5	5.9	2.1	22.0	5.0
ITIH2	0.8	0.5	0.9	0.7	0.5	0.3
MAL	n.d.	-	n.d.	-	n.d.	-
MDA5	6.1	2.9	5.1	1.9	22.4	9.9
MET	1.2	0.5	1.1	0.4	1.3	0.5
MNT	0.7	0.3	0.8	0.5	0.5	0.4
MX1	40.2	13.6	48.7	35.9	103.9	52.7
MX2	164.7	132.7	156.3	127.5	489.0	479.5
MYD88	3.6	1.1	4.1	2.8	8.8	4.4
NMI	3.1	2.3	3.0	2.4	12.7	13.1
NPEPPS	1.0	0.2	1.1	0.8	1.3	0.9
NRG1	0.9	0.2	0.8	0.2	0.8	0.2
OAS1	26.0	14.6	36.0	33.3	72.6	43.2
OAS2	61.5	29.6	66.5	39.3	191.2	49.4
PML	4.5	1.7	5.9	6.0	11.2	7.1
PRKCZ	1.0	0.2	1.1	0.4	0.8	0.6
PRKRA	0.8	0.3	0.7	0.4	0.6	0.5
PSME2	1.6	0.2	1.6	0.3	2.8	0.4
PTTG1	0.7	0.4	0.9	0.6	0.8	0.7
RCBTB1	1.0	0.1	0.9	0.1	1.3	0.3
RIG-I	15.9	8.0	13.9	6.6	54.7	26.3
SAMSN1	1.2	0.3	1.1	0.4	2.1	1.3
SH2D1A	n.d.	-	n.d.	-	n.d.	-
SHB	0.9	0.3	1.1	0.6	0.7	0.7
SHFM1	0.9	0.1	1.0	0.3	0.7	0.2

SLC1A2	0.9	0.3	0.6	0.2	0.6	0.2
STAT1	7.5	2.1	8.2	5.0	16.8	8.3
STAT2	3.0	0.7	2.9	2.6	8.6	6.0
TAP1	4.1	1.2	4.1	1.8	12.9	4.2
TLR3	4.7	1.5	4.2	1.8	19.0	9.4
TNFSF10	2.3	1.0	2.2	1.3	12.6	7.9
TRAF3	0.8	0.3	0.9	0.4	0.8	0.6
VEGFA	1.4	0.7	1.5	1.4	1.5	1.0

**Table S1.**

Human islets from three donors were treated with IFN $\lambda$ 1 (100 ng/ml), IFN $\lambda$ 2 (100 ng/ml) or IFN $\alpha$  (1000 U/ml) for 6 h. After 6 h mRNA was isolated and the mRNA expression levels of 86 ISGs were measured using real time RT-PCR. The mRNA expression levels were normalized to the expression level of GAPDH (individual genes) or five house keeping genes (genes analysed using PCR array) and compared to untreated control from the same donor. A  $C_t$  value of  $\geq 35$  for any of the indicated genes was considered as below the detection level of the assay and set as not detected (n.d.). The data is presented as fold induction compared to untreated control, mean  $\pm$  S.D. for three separate human islet donors.