

Table S1: List of 23 type I IFN response genes that were measured

Gene Symbol	Gene Name
EIF2AK2	eukaryotic translation initiation factor 2-alpha kinase 2
EPSTI1	epithelial stromal interaction 1
HERC5	HECT and RLD domain containing E3 ubiquitin protein ligase 5
IFI27	interferon, alpha-inducible protein 27
IFI44L	interferon-induced protein 44-like
IFI6	interferon, alpha-inducible protein 6
IFIT1	interferon-induced protein with tetratricopeptide repeats 1
IFIT2	interferon-induced protein with tetratricopeptide repeats 2
IFITM1	interferon induced transmembrane protein 1
IFITM3	interferon induced transmembrane protein 3
IL1RN	interleukin 1 receptor antagonist
LGALS3BP	lectin, galactoside-binding, soluble, 3 binding protein
LY6E	lymphocyte antigen 6 complex, locus E
MX1	MX dynamin-like GTPase 1
OAS2	2'-5'-oligoadenylate synthetase 2, 69/71kDa
OAS3	2'-5'-oligoadenylate synthetase 3, 100kDa
PARP12	poly (ADP-ribose) polymerase family, member 12
PLSCR1	phospholipid scramblase 1
RSAD2	radical S-adenosyl methionine domain containing 2
RTP4	receptor (chemosensory) transporter protein 4
SAMD9L	sterile alpha motif domain containing 9-like
TNFAIP6	tumor necrosis factor, alpha-induced protein 6
TNFSF10	tumor necrosis factor (ligand) superfamily, member 10

Table S2: Genes differentially expressed between SLE and IFN β -treated MS patients

Gene name	Fold difference	Adjusted P value
<i>Upregulated in SLE patients (GC-A)</i>		
IFI27	7.56	<0.001
IFI44L	1.39	0.006
IFITM1	1.69	<0.001
LY6E	1.32	0.006
TNFAIP6	1.73	0.003
<i>Upregulated in IFNβ-treated MS patients (GC-B)</i>		
EIF2AK2	1.75	<0.001
HERC5	4.63	<0.001
IFIT1	3.11	<0.001
IFIT2	3.86	<0.001
IL1RN	3.11	<0.001
LGALS3BP	1.68	<0.001
MX1	1.14	0.044
OAS2	1.77	<0.001
PARP12	1.27	0.009
PLSCR1	1.59	<0.001
RSAD2	1.93	<0.001
SAMD9L	1.92	<0.001
TNFSF10	2.13	<0.001