

**Table S1.** Amino acid sequences of the Designed Peptides.

Peptide	Sequence
Pc-1	RIKRFWPVVIRTVVAGYNLYRAIKKK-NH ₂
Pc-2	KKWRKVIKKVVARYK-NH ₂
Pc-3	FWKKVIKVRKAVKK-NH ₂
Pc-4	VVKKVRKLYKKIYKR-NH ₂
Pc-5	VCVKKVRKLYKKIYKCR-NH ₂

Table S2. Physicochemical properties of the Designed Peptides.

Peptide	Length	Molecular weight/Da	Theoretical pI	Netcharge	Instability index	Aliphatic index	GRAVY
Pc-1	26	3175.91	11.60	+8	13.26	112.31	−0.108
Pc-2	15	1930.46	11.30	+8	−12.67	90.67	−1.047
Pc-3	15	1914.46	12.05	+8	17.83	90.67	−0.773
Pc-4	15	1949.5	10.79	+8	12.17	110.00	−0.940
Pc-5	17	2155.78	10.24	+8	−11.70	97.06	−0.535

Table S3. Primer sequences.

Gene	Primer sequences (5'→3')
<i>Ifnb</i>	GCCTTTGCCATCCAAGAGATGC ACACTGTCTGCTGGTGGAGTTC
<i>Mx1</i>	GACCATAGGGGTCTTGACCAA AGACTTGCTCTTTCTGAAAAGCC
<i>Isg15</i>	TGACTGTGAGAGCAAGCAGC CCCCAGCATCTTCACCTTTA
<i>Hprt</i>	CTCATGGACTGATTATGGACAGGAC GCAGGTCAGCAAAGAACTTATAGCC
<i>IFNB</i>	AGCTGAAGCAGTTCCAGAAG AGTCTCATTCCAGCCAGTGC
<i>MX1</i>	GTTTCCGAAGTGGACATCGCA CTGCACAGGTTGTTCTCAGC
<i>ISG15</i>	CGCAGATCACCCAGAAGATCG TTCGTGCGATTTGTCCACCA
<i>HPRT</i>	GCTATAAATTCTTTGCTGACCTGCTG AATTACTTTTATGTCCCCTGTTGACTGG