TGEV infection up-regulates FcRn expression via activation of NF-κB signaling

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Fig. S1 Analysis of NF-κB transcription factor binding sites in the 5'-flanking region of the pFcRn. The pFcRn-1, pFcRn-2, pFcRn-3 and pFcRn-4 fragments used in the luciferase reporter gene assay. NF-κB binding sites that we analyzed in this study (NF-κB-1286, -1128, -894, -642 and -563) are highlighted in yellow. Predicted transcription start sites have been indicated in the red frame.

pFcRn-1> (-1381)
GCTATAGCTCTGATTCGACCCCTAACCTGGGAACCTCCATGTGCCGTGGGT
NF-κB-1286
GTGGCCCTAAAAAGCAAAGCAAAAAACAAAACAAAACAAAAAATGGGAG
TTTCCATTTCCGCTCGGTGTGTTAAGAACCCGACTGAGGTTCTTATCAGGGA
TGCAAGTTCAATCCCTGGCCTCACTCAGTGGGTTAAGGATCCCGCATTGTT
pFcRn-2> (-1150)
ATGGCTGTGGTATAGGCTGATATCTACAGCTTCAGCTGGACCCGTAGCCTGG
NF-κB-1128
GAACTTCCAGATGCCGCATGGCATGTATTGCTGTAAAAAGGAAAAGAACA
AAAAACAAATTGCACACACACGCACGCAAACACACACTCAACTTAGACAC
AGATGTTCACAGCAGCATTATTTACTACAGCCAAAAAGTGAAACGACCCAA
ATGCCCATCAGTTGATTAATGAATCCACAAAATGTGGTTGATCCAGACAATA
NF-κB-894
GAATATTATTCACCCATAGAAAGAAATTAAGGGAGTTCCTTGGTGGCTCTGT
GGTTTAAGGATCTGGGATCACTGCTGCGGCTCTGATTACACCTGTGGTTTG
GATTTGATCCCTGGCCCAGGAAATTCTGCACGACCTAGGCGAGGCCAAAA
AAGAAATGAAGTTTTGACACATGGTACCACATGCATAAATCTTGAAAACAG
TATTGGACATGGTGAAAAAAGCCAGACACAAAACGGCACCATATTGTAGGA
NF-κB-642
TTCCATTTCTCTGAAAATCCAGAAGAGGCAAATTCCTAGAGACAGAACGTA
pFcRn-3> (-577)
CACATCGGTGATTGCCAGGAGCCGAGGGGAGCAGCGGGGCTACTTAAAGG
NF-κB-563
GGTACGGGGTCTCCTTGGGGATGATGAAAAGGTTCTGGAACTAGGTAGTGG
CCGTGGTGGCACAACAGAGAAGGCGCTAAATGTCACCAACAGGAACGCTT
TTGTTTTGTGCATTTTACCGCAATAAAACGGATGAATGGAAGCATTATAGCG
GGAGTGTGGGCTGCGGGGGTGGGTGGGGGGGTTGGAAGAGGCCCCCAAG
CACGAAGGTATATCAGGACTCTGTTACTGAGGTCCTATCAGAAGCTATCAA
AGTACCGCAGGAGCACTTTAAGGGTACCCTGGGGGAGGGGTTCAAAGGAG
GAAGTGTGGAAGTATCTGGAAGACTTATCACAGCAGGAGCCAGTGAAGAC
pFcRn-4> (-208) **transcription start site-1**
CTGGGGGGGGGTGCTGACGAGGTAAGAAGGGGGCCTGCGCCGATCTCTAA
AGGTGGGGCTCCGATAAGGTTGACTCCCAACGTTGTCATGAATTTGCTGGA

TCGCCGGCACCCTCGAAAAACAAAACAAAACAAAGCCCCCAAACAAAAC

transcription start site-2

TCAAACCAGGGAGCCACAAAGAAAGAGACGGGGGAAAAAAAGGACCCA

-1 | EXON-1

AGTTTCTAGAGAGAGGCTGAGACCAGCTCCCGGCTGGGCCCAGGGCCCGG
GGTGTGCCCTGCAGCTGGGGGGCGGGGTTGGATATTCCCGGAGTGGAGGC
GCCTCTCCGGACAGGATGTGAGAGAGGAACTGGGGTCTCCAGTCACGGGA
GCCAGCTGGGGCCGCCGGCGGGAAGGGATCGCGGCTGCTGTGAGCGGGG
CTGGGGCCCCAGAGCCTGGGAGGCGAGGGCCGGGCGCCGGGTTCTCGGCT
CTCCAGGAGGAGGGAGCCCCGGGTCTGGACCTTTGGGTCGGAGGGAGGA
GGGGCGGGCGGGCGGGCGGGCGGGAGCCGAGGACTCGCGGGTCCGAGGG
AGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGGGCCGC
CTCCGCCGCCTCCCGGCCTATCCAGACTCTGTCACTCATTAACCCCGACGG
AGCAAACGAAGGGGTGAAAGTTCATCGGGGAGGCGGGCCTTTCGGTCACT
CTCCGGGACAGGAGCCCCGGAGCCCGCCGCCGCAGGGACTGGGGGACGC
AGGGCGGGGCGGGGCGGGGGTCCCAGGGAGTCACGCGCCCCCTCCCGCC
CCAGGTCTCCCGCTCAGG

Fig. S2 Alignment of pFcRn and human FcRn upstream sequences of the start codon.