

**Supplemental Table S1: Primers used to amplify IgG V domains.** Bold, annealing sequences; underline, restriction sites; italicized nucleotides, changes from wildtype sequence to accommodate EcoRI site; BCK, back; FRW, forward. PCR conditions: 1.5 mM MgCl<sub>2</sub>, 10 mM dNTP mixture, 0.2 μM each back and forward primers, 1 U Taq DNA polymerase and ~20 ng template DNA. Thermal cycling protocol: 1 denaturation cycle at 95°C, 5 min; 39 amplification cycles, each cycle consisting denaturation (1 min, 95°C), annealing (1 min, 55°C) and extension (1 min, 72°C). The final step was an extension to fill in incomplete fragments (10 min, 72°C).

CBH-7V <sub>H</sub> BCK	5' TCTGAGGAATT <u>CAGCTGGTGCAGTC</u> GGGCTGAG
CBH-7V <sub>H</sub> FRW	5' ACATGTGAAGCTT <u>GCTGCGCGACGGTGACCCGGGT</u>
CBH-7V <sub>L</sub> BCK	5' GCACATTCC <u>CAGATCTGACGT</u> CTGATGACCCAGTCTCCA
CBH-7V <sub>L</sub> FRW	5' AGTTCTAGAG <u>CGGCCGCAGTCCGTTGCTCTCGAGATTGGTCCCTCC</u>
HK14 VL BCK	5' GCACATTCC <u>CAGATCTGACATCGT</u> GATGACCCAGTCT
HK14 V <sub>L</sub> FRW	5' AGTTCTAGAG <u>CGGCCGCAGTCCGTAAGATGTCCACCTTGGTCCCTCC</u>
HK13 V <sub>L</sub> BCK	5' GCACATTCC <u>CAGATCTGACATCGT</u> GATGACCCAGTCTCCA
HK13 V <sub>L</sub> FRW	5' AGTTCTAGAG <u>CGGCCGCAGTCCGTTCGATCTCTAGCTTGGTCCCTG</u>
GG63 V <sub>L</sub> BCK	5' GCACATTCC <u>CAGATCTGACATCCAGATGACCCAGTCTCCT</u>
GG63 V <sub>L</sub> FRW	5' AGTCTAGAG <u>CGGCCGCAGTCCGTGTGATTCCACCTGGTCCC TTG</u>
GL2 V <sub>H</sub> BCK	5' TAGAATT <u>CAGCTGSWGSAGTCKGG</u>
GL2 V <sub>H</sub> FRW	5' TAAAGCTT <u>GCTGAGGAGACGGTGACCA</u>
GL2 V <sub>K</sub> BCK	5' TAAGATCT <u>GAHATYSTGWTGACBCAGTCT</u>
GL2 V <sub>K</sub> FRW	5' TAGCGGCCGCAGTCCGTT <u>TRATHHTCCASC</u>