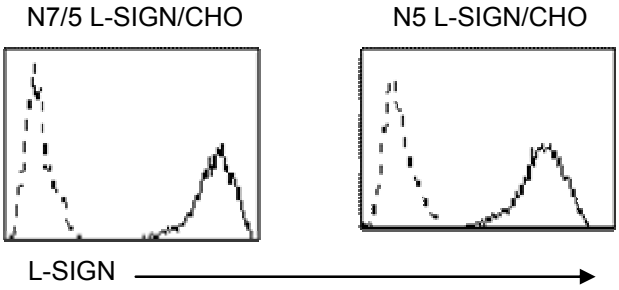
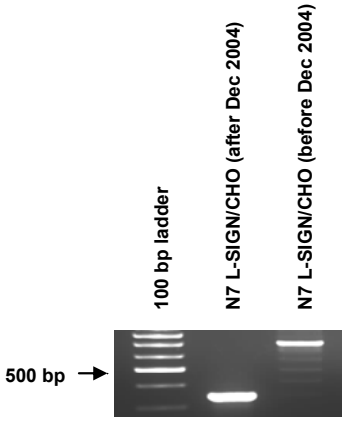
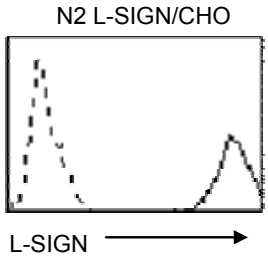
a.



b.



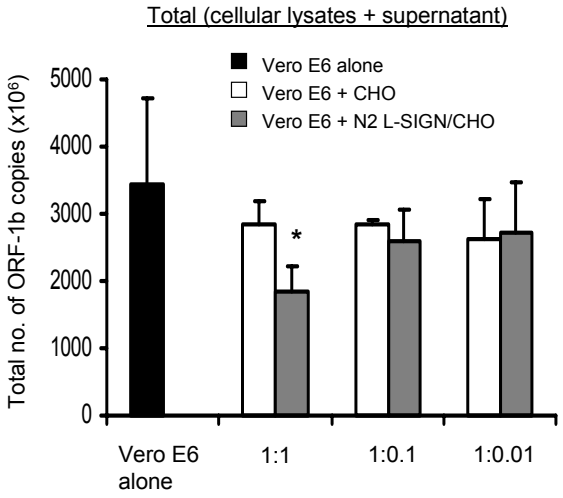
c.



d.

- 191 CAGGGTGTCT TGGCCATGGC GCCCTGGTGC TGCAACTCCT CTCCTTCATG CTCTTGGCTG 240
- 241 GGGTCCTGGT GGCCATCCTT GTCCAAGTGT CCAAGGTCCC CAGCTCCCTA AGTCAGGAAC 300
- 301 AATCCGAGCA AGACGCAATC TACCAGAACC TGACCCAGCT TAAAGCTGCA GTGGGTGAGC 360
- 361 TCTCAGAGAA ATCCAAGCTG CAGGAGATCT ACCAGGAGCT GACCCAGCTG AAGGCTGCAG 420
- 421 TGGGTGAGTT GCCAGAGAAA TCCAAGCTGC AGGAGATCTA CCAGGAGCTG ACCCGGCTGA 480
- 481 AGGCTGCAGT GGGTGAGTTG CCAGAGAAAT CCAAGCTGCA GGAGATCTAC CAGGAGCTGA 540
- 541 CCCGGCTGAA GGCTGCAGTG GGTGAGTTGC CAGAGAAATC CAAGCTGCAG GAGATCTACC 600
- 601 AGGAGCTGAC GGAGCTGAAG GCTGCAGTGG GTGAGTTGCC AGAGAAATCC AAGCTGCAGG 660
- 661 AGATCTACCA GGAGCTGACC CAGCTGAAGG CTGCAGTGGG TGAGTTGCCA GAGAAATCCA 720
- 721 AGCTGCAGGA GATCTACCAG GAGCTGACCC AGCTGAAGGC TGCAGTGGGT GAGTTGCCAG 780
- 781 ACCAGTCCAA GCAGCAGCAA ATCTATCAAG AACTGACCGA TTTGAAGATC GCATTTGAAC 840
- 841 GCCTGTGCCG CCACTGTCCC AAGGACTGGA CATTCTTCCA AGGAAACTGT TACTTCATGT 900
- 901 CTAACTCCCA GCGGAACTGG CACGACTCCG TCACCGCCTG CCAGGAAGTG AGGGCCCAGC 960

e.



Supplementary Figure 6. Co-cultures of stable clones of homozygous L-SIGN/CHO cells with Vero E6 cells in a closed infection system resulted in a reduced final SARS-CoV titer.

(**a**) L-SIGN expression on stable transfectants N5 and heterozygous N7/5 L-SIGN transfected CHO cells (L-SIGN/CHO) used in **Fig. 5**. $1x10^5$ cells were stained with monoclonal mouse anti-human L-SIGN antibody (clone 120604, from AIDS Research Programme, NIH, USA, shown as solid line) or isotype control antibody (dash line). Data are representative of 3 experiments. (**b**) After prolonged culture, the original stable N7 L-SIGN transfected CHO cells had lost 5 tandem repeats in their mRNA and carried only 2-repeats in the exon 4. RT-PCR of the RNA from the non-truncated N7 L-SIGN stable clone selected in July 2004, using the forward and reverse primers (underlined sequences in black) designed to amplify the neck region, yielded a PCR fragment of 683bp. In contrast, RT-PCR in Dec 2004 gave rise to a fragment of 338bp, indicating N7 truncation. The PCR conditions for these primers were 30s at 94^{o}C, 30s at 60^{o}C and 60s at 72^{o}C for 30 cycles. (**c**) L-SIGN expression on stable transfectants N7 L-SIGN transfected CHO cells (L-SIGN/CHO) that had lost 5 tandem repeats in exon 4 (N2). $1x10^5$ cells were stained with monoclonal mouse anti-human L-SIGN antibody (clone 120604, from AIDS Research Programme, NIH, USA, shown as solid line) or isotype control antibody (dash line).

Data are representative of 3 experiments. (**d**) The tandem-repeat region of N7 L-SIGN DNA comprises of 7 and a half repeats of 69 nucleotides from nucleotide 318 to 846 (shown in red) analysed from the original N7 L-SIGN/CHO stable clone selected in our laboratory. However, this N7 L-SIGN/CHO stable clone has 5 repeats deleted from nucleotide 360 to 704 (in bold and underlined) without a frame shift noticed when examined in Dec 2004, and only expressed 2-repeats (N2). (**e**) Co-culture of $1x10^4$ Vero E6 cells with $1x10^4$, $1x10^3$, or $1x10^2$ N2 L-SIGN/CHO stable transfectants (at a ratio of 1:1, 1:0.1, and 1:0.01) in 96-well plate, followed by infection with 0.01 pfu *per* Vero E6 cell, and cultured for 48h. No wash procedures were conducted all along in this experiment. A significant reduction of the final total viral ORF-1b copy numbers at 48h was demonstrated at a co-culture ratio 1:1. Data are expressed as mean ± SD from triplicate and are representative of 3 experiments. *: $p<0.05$ in comparison to co-cultures of Vero E6 with CHO cells at 1:1.