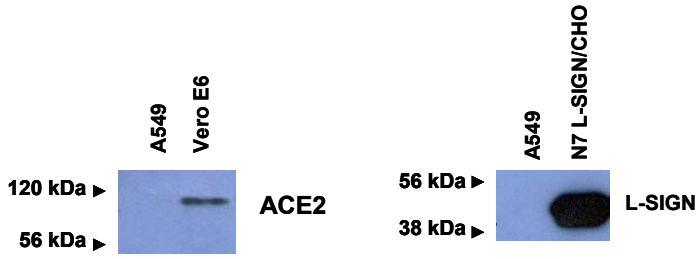
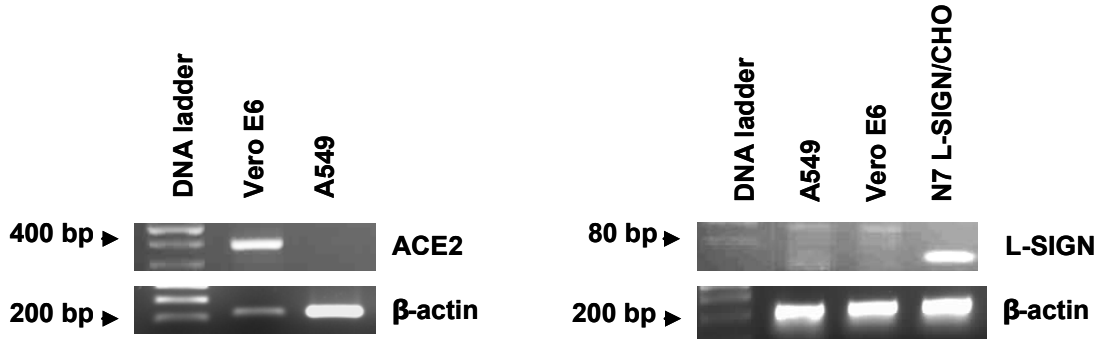
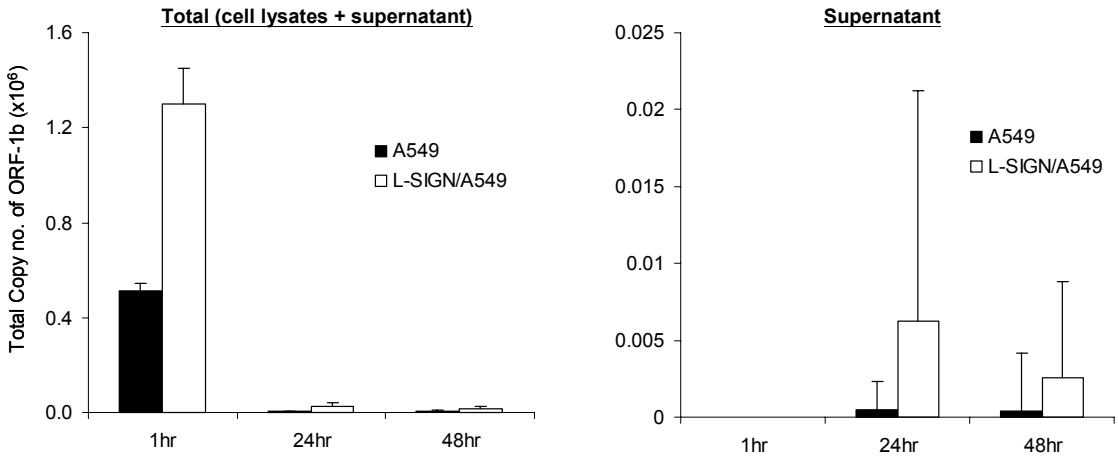
**a**.


A549
Vero E6
120 kDa
56 kDa
ACE2
A549
N7 L-SIGN/CHO
56 kDa
38 kDa
L-SIGN

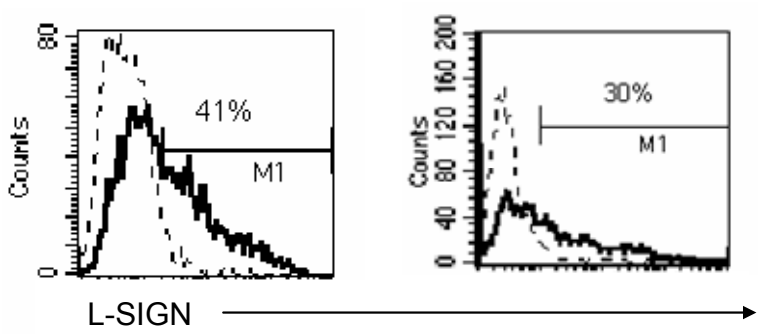
**b**.


DNA ladder
Vero E6
A549
400 bp
200 bp
ACE2
β-actin
DNA ladder
A549
Vero E6
N7 L-SIGN/CHO
80 bp
200 bp
L-SIGN
β-actin

**c**.


Total (cell lysates + supernatant)
Total Copy no. of ORF-1b (x10⁶)
1.6
1.2
0.8
0.4
0.0
A549
L-SIGN/A549
1hr
24hr
48hr
Supernatant
0.025
0.02
0.015
0.01
0.005
0
A549
L-SIGN/A549
1hr
24hr
48hr

**d**.


Counts
80
0
41%
M1
Counts
0 40 80 120 160 200
30%
M1
L-SIGN

**Supplementary Figure 2. A549 cells do not express ACE2 and L-SIGN, and SARS-CoV binding to L-SIGN-transfected A549 cells also underwent degradation over time.**

(**a**) Western blotting for protein expression of ACE2 (left panel) and L-SIGN (right panel) in A549 cells with Vero E6 cells and N7 L-SIGN transfected CHO cells as a positive control respectively. (**b**) RT-PCR for mRNA expression of ACE2 (left panel) and L-SIGN (right panel) in A549 cells with Vero E6 cells and N7 L-SIGN transfected CHO cells as a positive control respectively. Data are representative of 3 experiments. (**c**) N7 L-SIGN transfected A549 and mock transfected cells were pulsed with 1 pfu/cell SARS CoV. After washing, cells were further incubated for 24h and 48h before harvest for the quantification of the viral ORF-1b. Total ORF-1b copy numbers (cell lysates + supernatant) and those in the supernatant were shown in the left and right panels respectively. Data are expressed as mean ± SD from triplicates and are representative of 3 experiments. (**d**) L-SIGN expression on N7 L-SIGN transfected A549 cells on post-transfection day 2 from two independent experiments. Transfection of L-SIGN in A549 cells was less efficient in comparison to that in CHO cells (see **Supplementary Fig. 4**). Solid line: anti-L-SIGN antibody; dash line: isotype control antibody.

**Methods for RT-PCR and western blotting**:

Total RNA extracted from Vero E6, A549 and N7 L-SIGN/CHO cells was reverse-transcribed into cDNA. A 388 bp fragment of the ACE2 transcript was PCR-amplified using specific primers (forward primer: 5'-CCCTTTGGACAGAAACCAAA-3'; reverser primer: 5'-GGCTGCAGAAAGTGACATGA-3') with a PCR condition of 30s at 94$^{o}$C, 30s at 55$^{o}$C and 30s at 72$^{o}$C for 40 cycles. The 60 bp fragment of the L-SIGN transcript was amplified using specific primers (forward primer: 5'-CAACAACCAGTGGCATCAGA-3' and reverse primer: 5-'GGCCATGTATCTGCTGGAAT-3') with a PCR condition of 30s at 94$^{o}$C, 30s at 55$^{o}$C and 30s at 72$^{o}$C for 40 cycles. For internal control, a 229 base-pair fragment of β actin was amplified using forward (5'-CCCAAGGCCAACCGCGAGAAG-3')

and reverse primer (5'-GTCCCGGCCAGCCAGGTCCAG-3') with 15s at 94$^{o}$C, 15s at 65$^{o}$C and 20s at 72$^{o}$C for 35 cycles. For Western blotting, cellular protein was extracted and analyzed with SDS-PAGE electrophoresis. The ACE2 expression was detected using 1 μg/ml mouse anti-human ACE2 monoclonal Ab (clone 171606, R&D Systems Inc., USA). The L-SIGN expression was detected using 1 μg/ml mouse monoclonal antibody directed against the neck domain of the human L-SIGN/DC-SIGN (clone DC28, NIH Aids Research Program, USA).