

Supplementary Materials: Mutual Inhibition of Antithrombin III and SARS-CoV-2 Cellular Attachment to Syndecans: Implications for COVID-19 Treatment and Vaccination

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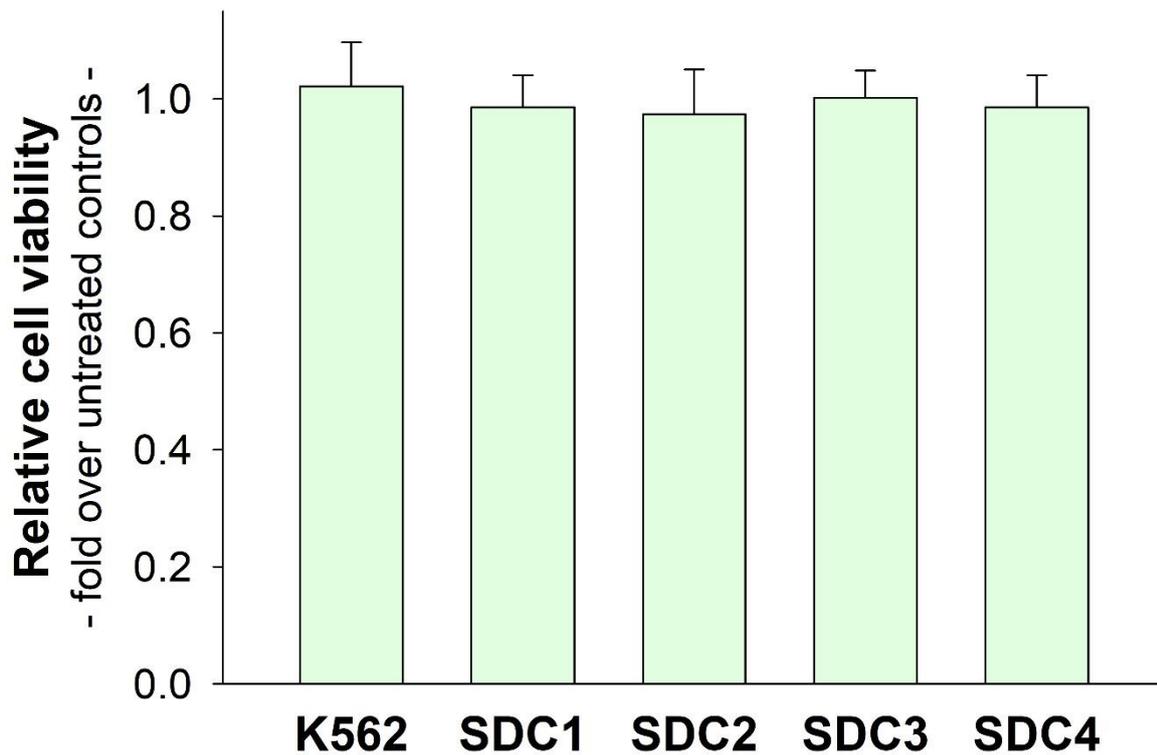


Figure S1. ATIII does not affect the cellular viability of K562 cells and SDC transfectants. WT K562 cells and stable SDC transfectants were incubated with or without 5 U/mL of recombinant ATIII for 30 min at 37°C. Cellular viability was then measured with the EZ4U assay, and detected measures were normalized to untreated cells as controls. The bars represent the mean + SEM of five independent experiments. Statistical significance vs. controls was assessed with ANOVA. Compared to controls, no statistically significant differences were detected in the viability of ATIII-treated cells.

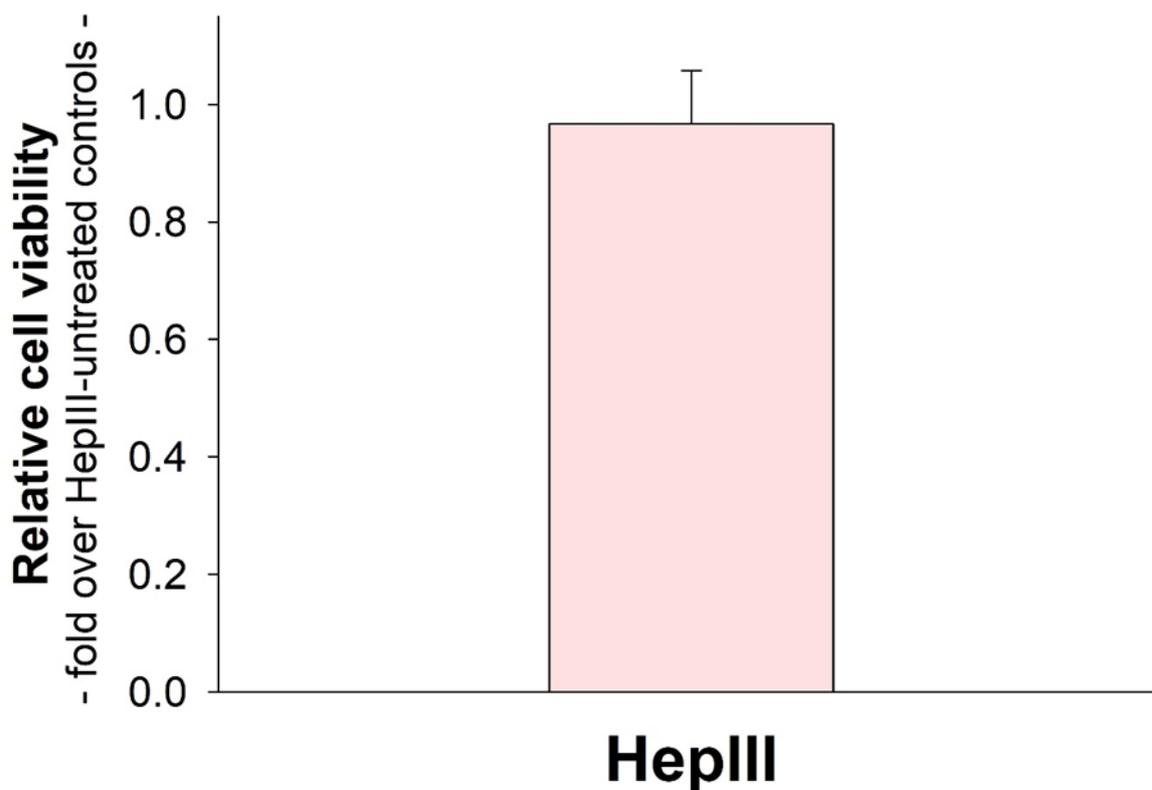


Figure S2. HepIII does not affect SDC4 transfectants' cellular viability. SDC4 transfectants were incubated with or without HepIII for 4 h at 37°C. Cellular viability was then measured with the EZ4U assay, and detected measures were normalized to HepIII-untreated cells as controls. The bars represent the mean + SEM of three independent experiments. Statistical significance vs. controls was assessed with ANOVA. Compared to controls, no statistically significant differences were detected in the viability of HepIII-treated cells.

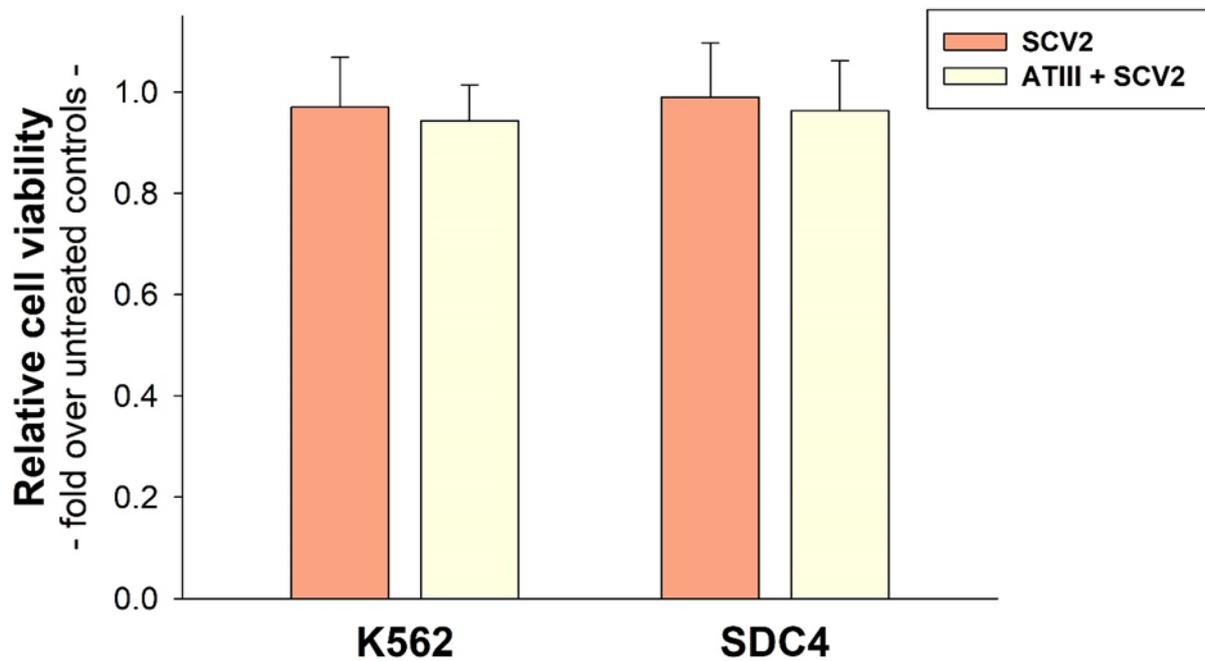


Figure S3. SCV2 does not affect the cellular viability of K562 cells and SDC4 transfectants at 1 MOI. WT K562 cells and stable SDC4 transfectants were exposed to 1 MOI of the heat-inactivated WT SCV2 with or without 5 U/mL of ATIII for 4 h at 37°C. Cellular viability was then measured with the EZ4U assay, and detected measures were normalized to untreated cells as controls. The bars represent the mean + SEM of three independent experiments. Statistical significance vs. controls was assessed with ANOVA. Compared to controls, no statistically significant differences were detected in the viability of SCV2-treated cells.

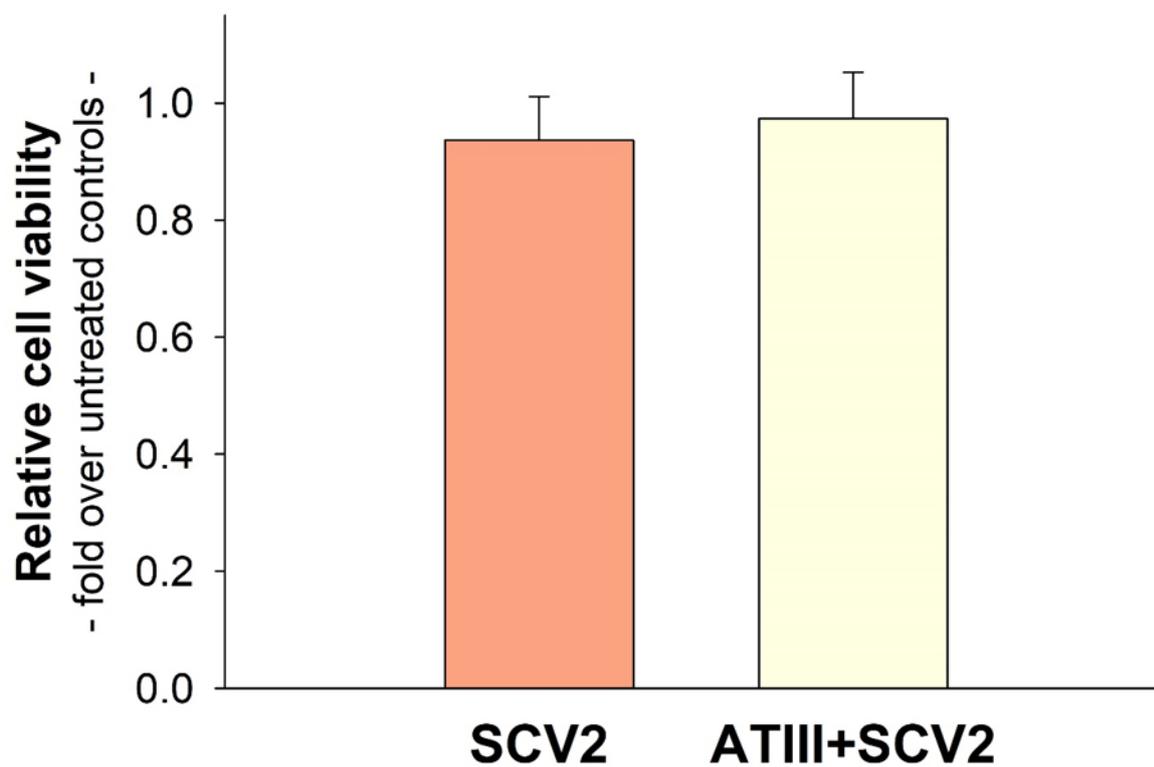


Figure S4. SCV2 does not affect the cellular viability of Calu-3 cells at 1 MOI. WT Calu-3 cells were exposed to 1 MOI of the heat-inactivated WT SCV2 with or without 5 U/mL of ATIII for 4 h at 37°C. Cellular viability was then measured with the EZ4U assay, and detected measures were normalized to untreated cells as controls. The bars represent the mean + SEM of three independent experiments. Statistical significance vs. controls was assessed with ANOVA. Compared to controls, no statistically significant differences were detected in the viability of SCV2-treated cells.

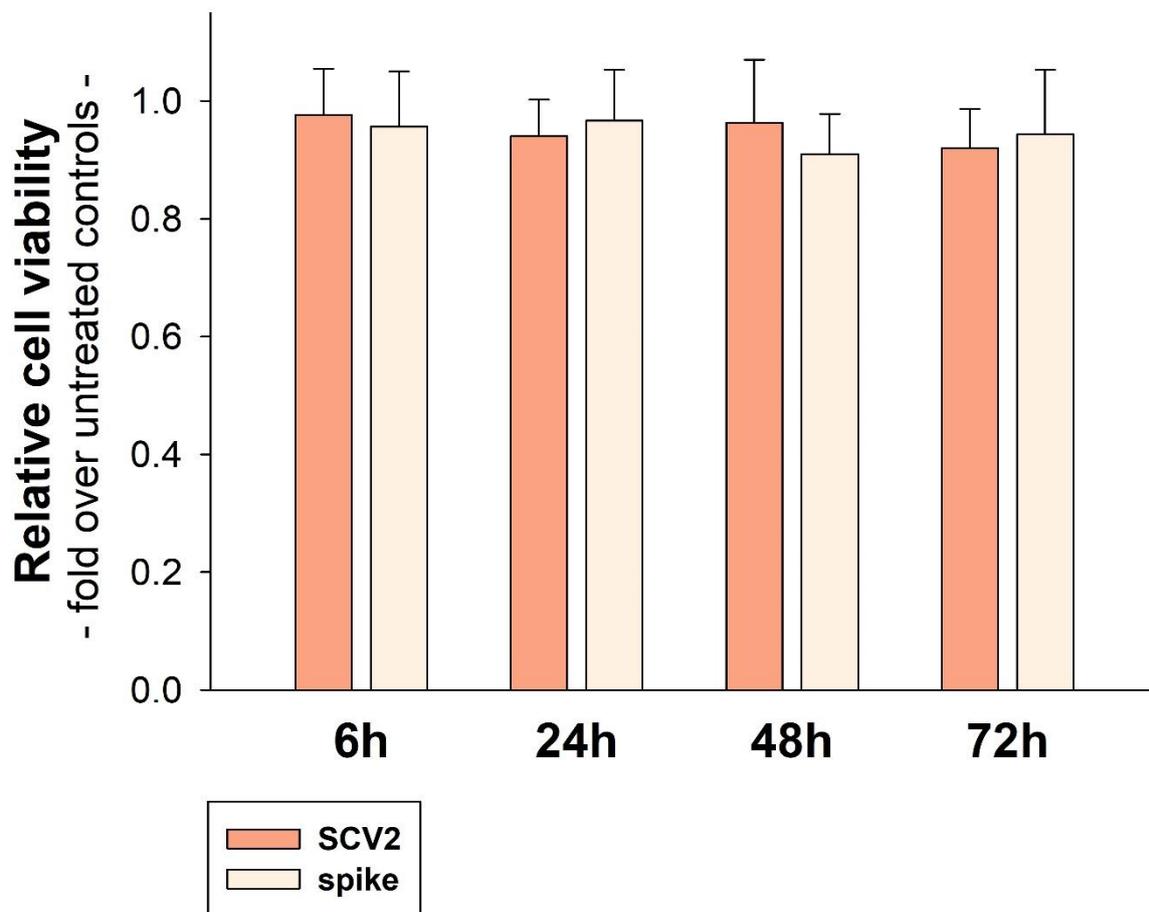


Figure S5. SCV2 or the spike protein does not affect the cellular viability of HMEC-1 cells. HMEC-1 cells were incubated with or without heat-inactivated SCV2 (1 MOI) or recombinant spike (5 μM) for 6, 24, 48 or 72 h at 37 °C. Cellular viability was then measured with EZ4U assay and detected measures were then normalized to untreated cells as controls. The bars represent the mean + SEM of three independent experiments. Statistical significance vs. controls was assessed with ANOVA. Compared to controls, no statistically significant differences were detected in the viability of SCV2-treated cells.