## Supporting Information

## Biomechanical dependence of SARS-CoV-2 infections

Alexandra Paul ${ }^{1,2, *}$, Sachin Kumar ${ }^{1,3,4,{ }^{*}}$, Tamer S. Kaoud ${ }^{5}$, Madison R. Pickett ${ }^{1}$, Amanda L. Bohanon ${ }^{5}$, Janet Zoldan ${ }^{1}$, Kevin N. Dalby ${ }^{5}$, and Sapun H. Parekh ${ }^{1 *}$

${ }^{1}$ Department of Biomedical Engineering, University of Texas at Austin, Austin, TX 78712.
${ }^{2}$ Department of Biology and Biological Engineering, Chalmers University of Technology, SE412 98, Gothenburg, Sweden.
${ }^{3}$ Centre for Biomedical Engineering, Indian Institute of Technology Delhi, Hauz Khas, New Delhi, 110016, India.
${ }^{4}$ All India Institute of Medical Sciences, Ansari Nagar, New Delhi, 110029, India.
${ }^{5}$ Division of Chemical Biology and Medicinal Chemistry, University of Texas at Austin, Austin, TX 78712.
*Corresponding author: alexandra.paul@utexas.edu, sachin.kumar@cbme.iitd.ac.in, sparekh@utexas.edu

## Supporting Figures



Figure S1. qPCR calibration of viral DNA content versus titer.

## Supporting Tables

Table S1. Viral titer in different batches of pseudotyped lentivirus production as calculated from the standard calibration curve shown in Figure S3.

| S protein mutation | mean $\mathbf{C t}$ | titer [IU/ml] |
| :--- | :--- | :--- |
| WT | 19.772 | $8.77 \mathrm{E}+06$ |
| D614G | 22.199 | $2.25 \mathrm{E}+06$ |

## Supporting Videos

Video S1. ZsGreen expression in ACE2 HEK 293T infected with pseudotyped lentiviruses displaying VSV-G (viral envelope glycoprotein) during the first 72 hours (image spacing: 2 h ). Scale bar $300 \mu \mathrm{~m}$.

Video S2. ZsGreen expression in ACE2 HEK 293T infected with pseudotyped lentiviruses displaying WT S during the first 72 hours (image spacing: 2 h ). Scale bar $300 \mu \mathrm{~m}$.

Video S3. ZsGreen expression in HEK 293T infected with pseudotyped lentiviruses displaying VSV-G (viral envelope glycoprotein) during the first 72 hours (image spacing: 2 h ). Scale bar $300 \mu \mathrm{~m}$.

Video S4. ZsGreen expression in HEK 293T infected with pseudotyped lentiviruses displaying WT S during the first 72 hours (image spacing: 2 h ). Scale bar $300 \mu \mathrm{~m}$. No infection events can be observed.

