

Induction of Th1/Th2-balanced protection against SARS-CoV-2 through mucosal delivery of an adenovirus vaccine expressing an
engineered spike protein

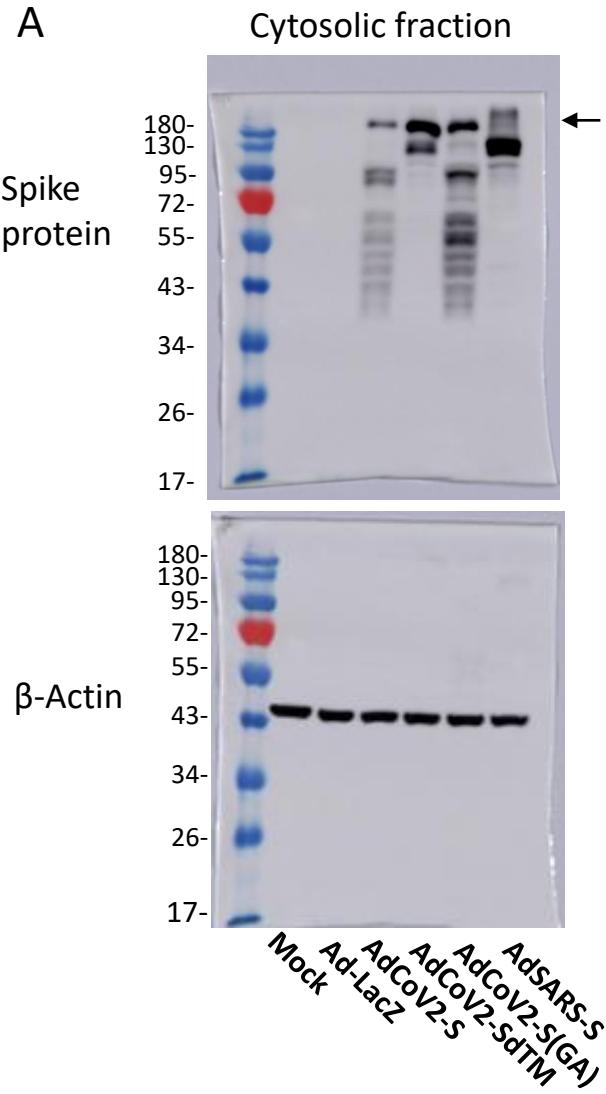
Nai-Hsiang Chung^{1,2}, Ying-Chin Chen¹, Shiu-Ju Yang¹, Yu-Ching Lin¹, Horng-Yunn Dou¹, Ching-Len Liao¹, Yen-Hung Chow^{1,3*}

¹National Institute of Infectious Disease and Vaccinology, National Health Research Institutes, Zhunan, Taiwan; ²Graduate Program of Biotechnology in Medicine, Institute of Molecular and Cellular Biology, National Tsing Hua University, Hsinchu, Taiwan; ³Graduate Institute of Biomedical Sciences, China Medical University, Taichung, Taiwan.

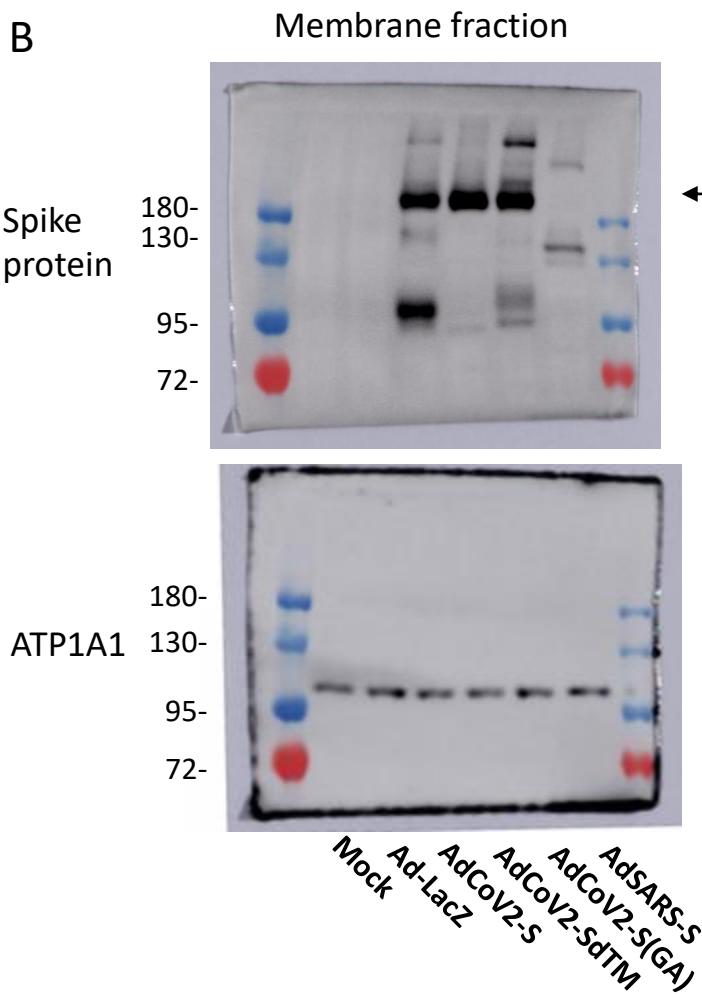
Tel.: 886-37-246166 ext. 37738 (Y.H. Chow)

Email address: choeyenh@nhri.org.tw (Y.H. Chow)

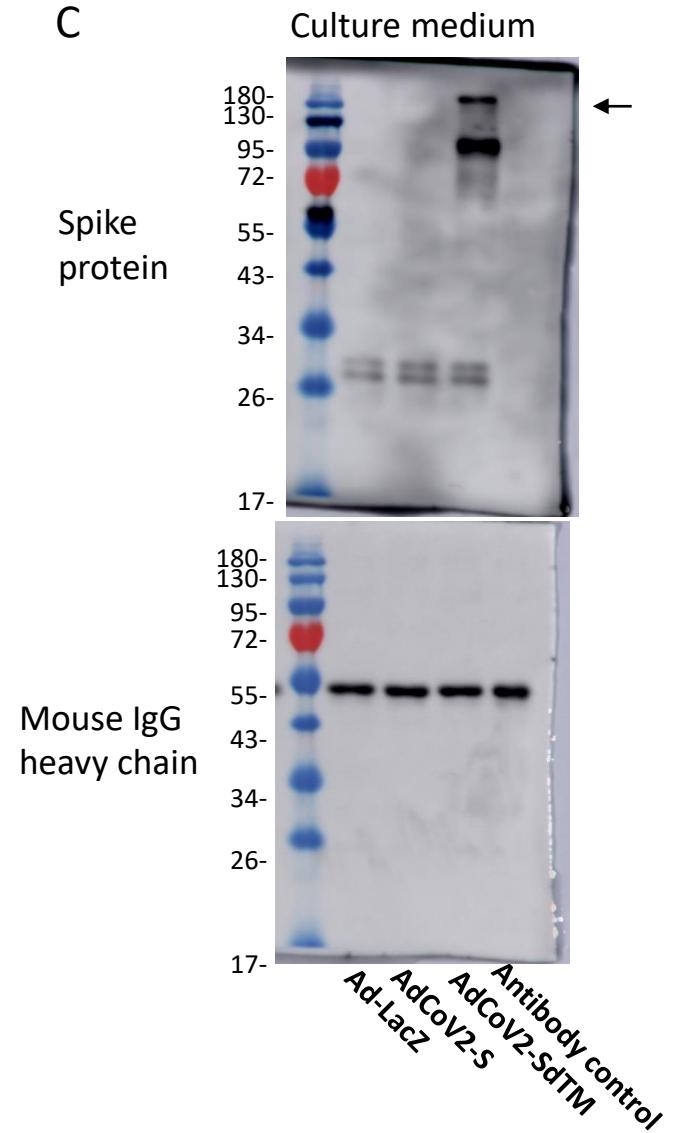
A



B



C



Supplementary Figure 1. Expression of SARS-CoV-2 spike expression in AdCoV2-infected 293 cells. Uninfected cells (Mock) and cells infected individually with Ad-LacZ, AdCoV2-S, AdCoV2-SdTM, AdCoV2-S (GA), and AdSARS-S at an MOI of 0.1 for 24 h were used. Parts of the culture medium (C) and the lysate were harvested. Lysates were extracted to obtain cytosolic (A) and membrane (B) fractions. The prepared samples (A, B, and C) were mobilized in SDS-PAGE electrophoresis and transferred onto the western blot membrane, then blotted with S-specific antibodies, (A and B) Mab5 or (C) COVID-19, 2019-nCoV. The same samples were also independently subjected to immunoblotting with specific antibodies against (A) β -actin, (B) ATP1A1, and (C) mouse IgG heavy chain, respectively.