

Supplementary Data

Broad-spectrum antiviral activity of 3D8, a nucleic acid-hydrolyzing single chain variable fragment (scFv), targeting SARS-CoV-2 and multiple coronaviruses

Gunsup Lee^{1¶}, Shailesh Budhathoki^{2¶}, Geum-Young Lee³, Kwang-ji Oh¹, Yeon Kyoung Ham¹, Young Jun Kim¹, Ye Rin Lim^{1,4}, Phuong Thi Hoang⁵, Yongjun Lee⁵, Seok-Won Lim⁶, Jun-Mo Kim⁶, Seungchan Cho³, Tai-Hyun Kim¹, Jin-Won Song³, Sukchan Lee^{5*} and Won-Keun Kim^{2,4*}

¹Novelgen Co., Ltd., R&D center, 77, Changnyong-daero 256 beon-gil, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea

²Department of Microbiology, College of Medicine, Hallym University, Chuncheon, Republic of Korea

³Department of Microbiology, Korea University College of Medicine, Seoul, Republic of Korea

⁴Institute of Medical Science, College of Medicine, Hallym University, Chuncheon, Republic of Korea

⁵College of Biotechnology and Bioengineering, Sungkyunkwan University, Suwon, Republic of Korea

⁶Animal Functional Genomics & Bioinformatics Lab., Department of Animal Science and Technology, Chung-Ang University, Anseong, Gyeonggi-do, Republic of Korea

Supplement table 1. Primers used for in vitro transcription viral spike gene amplification

Primer	Sequence	Type	Accession No.
SARS-CoV-2	5'- CAGATGCTGGCTTCATCAAA -3'	Forward	NC_045512
	5'- CATTGAGGCAGGTCAATTCT -3'	Reverse	
HCoV-OC43	5'- AGCTATAACCCAATGGCAGGAA -3'	Forward	NC_006213
	5'- CCAGTGGTAATCGCTCCAC -3'	Reverse	
PEDV	5'- TGTCTCTGCGTCTTTGGTG -3'	Forward	NC_003436
	5'- CTGCCACTTGCAGGATCATA -3'	Reverse	