

Supplementary Figure

(A)

hACE2-eGFP

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gctagcgttt aaacggggccc tctagaccAT GTCAAGCTCT TCCTGGCTCC TTCTCAGCCT TGTGCTGTA ACTGCTGCTC AGTCCACCAT TGAGGAACAG 100
GCCAAGACAT TTTTGGACAA GTTTAACCCAG GAAGCCGAAG ACCTGTTCTA TCAAAGTTCA CTTGCTTCTT GGAATTATAA CACCAATATT ACTGAAGAGA 200
ATGTCCAAA CATGAATAAT GCTGGGGACA AATGGTCTGC CTTTTTAAAG GAACAGTCCA CACTTGCCCA AATGTATCCA CTACAAGAAA TTCAGAATCT 300
CACAGTCAAG CTTTCAGCTGC AGGCTCTTCA GCAAAAATGGG TCTTCAGTGC TCTCAGAAGA CAAGAGCAAA CCGTTGAACA CAATTCATAA TACAATGAGC 400
ACCATCTACA GTACTGGAAA AGTTTGTAA CCGATAAATC CACAAGAATG CTTATTACTT GAACCAGGTT TGAATGAAAT AATGGCAAAC AGTTTLAGACT 500
ACAAATGAGAG GCTCTGGGTG TGGGAAAGCT GGAGATCTGA GGTTCGGCAAG CAGCTGAGGC CATTATATGA AGAGTATGTG GTCTTGA AAA ATGAGATGGC 600
AAGAGCAAAT CATTATGAGG ACTATGGGGA TTATTGGAGA GGAGACTATG AAGTAAATGG GGTAGATGGC TATGACTACA GCCCGGCCA GTTGATTGAA 700
GATGTGGAAC ATACCTTTGA AGAGATTAAA CCATTATATG AACATCTTCA TGCCTATGTG AGGGCAAAGT TGATGAATGC CTATCCTTCC TATATCAGTC 800
CAATTGGATG CCTCCCTGCT CATTTGCTTG GTGATATGTG GGGTAGATTT TGGACAAAATC TGACTACTTT GACAGTTCCC TTTGGACAGA AACCAACAT 900
AGATGTTACT GATGCAATGG TGGACCAGGC CTGGGATGCA CAGAGAATAT TCAAGGAGGC CGAGAAGTTC TTTGTATCTG TTGGTCTTCC TAATATGACT 1000
CAAGGATTCT GGGAAAATTC CATGCTAACG GACCCAGGAA ATGTTTCAGAA AGCAGTCTGC CATCCCACAG CTTGGGACCT GGGGAAGGGC GACTTCAGGA 1100
TCCTTATGTG CACAAAAGTG ACAAATGGAC ACTTCCTGAC AGTCTCATCAT GAGATGGGGC ATATCCAGTA TGATATGGCA TATGCTGCAC AACCTTTTCT 1200
GCTAAGAAAT GGAGCTAATG AAGGATTCCA TGAAGCTGTT GGGGAAATCA TGTCACTTTC TGCAGCCACA CTAAGCATT TAAAATCCAT TGGTCTTCTG 1300
TCACCCGATT TTCAAGAAGA CAATGAAACA GAAATAAACT TCCTGCTCAA ACAAGCACTC ACATTGTGTTG GACTCTGCC ATTTACTTAC ATGTTAGAGA 1400
AGTGGAGGTG GATGGTCTTT AAAGGGGAAA TTCCCAAAGA CCAGTGGATG AAAAAGTGGT GGGAGATGAA GCGAGAGATA GTTGGGGTGG TGGAACTTGT 1500
GCCCATGAT GAAACATACT GTGACCCCGC ATCTCTGTTT CATGTTTCTA ATGATTACTC ATTCATTCGA TATTACACA GGACCCCTTA CCAATCCAG 1600
TTTTCAAGAAG CACTTTGTCA AGCAGTAAA CATGAAGGCC CTCTGCACAA ATGTGACATC TCAAACCTTA CAGAAGCTGG ACAGAAACTG TTCAATATGC 1700
TGAGGCTTGG AAAATCAGAA CCCTGGACCC TAGCATTGGA AAATGTTGTA GGAGCAAAGA ACATGAATGT AAGGCCACTG CTCAACTACT TTGAGCCCTT 1800
ATTTACCTGG CTGAAAGACC AGAACAAGAA TTCTTTTGTG GGATGGAGTA CCGACTGGAG TCCATATGCA GACGGACCGG TCGCCACCAT GGTGAGCAAG 1900
GGCGAGGAGC TGTTACCCGG GGTGGTGCC ATCCTGGTCG AGCTGGACGG CGACGTAAC GGCCACAAGT TCAGCGTGTG CGGCGAGGGC GAGGGCGATG 2000
CCACTACCGC CAAGCTGACC CTGAAGTTCA TCTGCACCAC CGGCAAGCTC CCGTGCCTT GGCCACCCTC CGTGACCACA CTGACTTACG CGCTGCATG 2100
CTTCAGCCGC TACCCCGACC ACATGAAGCA GCACGACTTC TTCAAGTCCG CCAATGCCCGA AGGCTACCTC CAGGAGCGCA CCATCTTCTT CAAGGACGAC 2200
GGCAACTACA AGACCCGCGC CGAGGTGAAG TTCGAGGGCG ACACCCTGTT GAACCGCATC GAGCTGAAGG GCATCGACTT CAAGGAGGAC GGCAACATCC 2300
TGGGGCACAA GCTGGAGTAC AACTACAACA GCCACAACGT CTATATCATG CCGGACAAGC AGAAGAAGCG CATCAAGGTG AACTTCAAGA TCCGCCACAA 2400
CATCGAGGAC GGCAGCGTGC AGCTCGCCGA CCATACCAG CAGAACACCC CCATCGGGCA CGGCCCGGTG CTGCTGCCCG ACAACCACTA CCTGAGCACC 2500
CAGTCCAAGC TGAGCAAAGA CCCCACGAG AAGCGCGATC ACATGGTCTT GCTGGAGTTC GTGACCGCCG CCGGGATCAC TCTCGGCATG GACGAGCTGT 2600
ACAGTCACCA TCATCACCAT CACTAAagcg gccgc
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(B)

ER-mCherry-S1

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gctagcATGC TGCTATCCGT GCCGTTGCTG CTCGGCCTCC TCGGCCTGGC CGTCGCCGGA CCGGTCGCCA CCATGGTGAG CAAGGGCGAG GAGGACCAGA 100
TGGCCATCAT CAAGGAGTTC ATGCGCTTCA AGGTGCACAT GGAGGGCTCC GTGAACGGCC ACGAGTTCGA GATCGAGGGC GAGGGCGAGG GCCGCCCTA 200
CGAGGGCACC CAGACCGCCA AGCTGAAGGT GACCAAGGGT GGCCCCCTGC CCTTCGCCCTG GGACATCCTG TCCCCTCAGT TCATGTACGG CTCCAAGGCC 300
TACGTGAAGC ACCCCGCCGA CATCCCCGAC TACTTGAAGC TGCTCTTCCC CGAGGGCTTC AAGTGGGAGC GCGTGATGAA CTTGAGGAC GCGGGCTGG 400
TGACCGTGAC CCAGGACTCC TCCTGCAGG ACGGCGAGTT CATCTACAAG GTGAAGCTGC GCGGCACCAA CTCCCCTCC GACGGCCCGG TAATCGAGAA 500
GAAGACCATG GGCTGGGAGG CCTCCTCCGA GCGGATGTAC CCCGAGGACG GCGCCCTGAA GGGCGAGATC AAGCAGAGGC TGAAGCTGAA GGACGGCGGC 600
CACTACGACG CTGAGGTCAA GACCACCTAC AAGGCCAAGA AGCCCGTGCA GCTGCCCGGC GCCTACAACG TCAACATCAA GTTGGACATC ACCTCCACA 700
ACGAGGACTA CACCATCGTG GAACAGTACG AACGCGCCGA GGGCCGCCAC TCCACCGGGC GCATGGACGA GCTGTACAAG TCCGGACTCA GATCTCGAGC 800
TAGCTTTGAG ATTGACAAAG GAATTTACCA GACCTCTAAT TTCAGGGTTG TTCCCTCAGG AGATGTTGTG AGATTCCCTA ATATTACAAA CTTGTGCTCT 900
TTTGGAGAGG TTTTAAATGC TACTAAATTC CCTTCTGTCT ATGCATGGGA GAGAAAAAAA ATTTCTAATT GTGTTGCTGA TTAATCTGTG CTCTACAAC 1000
CAACATTTTT TTCACCTTT AAGTGCTATG GCGTTTCTGC CACTAAGTTG AATGATCTTT GCTTCTCAA TGCTATGCA GATTCTTTG TAGTCAAGGG 1100
AGATGATGTA AGACAAATAG CGCCAGGACA AACTGGTGTT ATTGCTGATT ATAATTATAA ATTGCCAGAT GATTTCTATG GTTGTGCTCT TGCTTGAAT 1200
ACTAGGAACA TTGATGCTAC TTCAACTGGT AATTATAATT ATAAATATAG GTATCTTAGA CATGGCAAGC TTAGGCCCTT TGAGAGAGAC ATATCTAATG 1300
TGCCTTTCTC CCCTGATGGC AAACCTTGCA CCCCACCTGC TCTTAATTGT TATTGGCCAT TAAATGATTA TGGTTTTTAC ACCACTACTG GCATTGGCTA 1400
CCAACCTTAC AGAGTTGTAG TACTTTCTTT TGAACCTTTA AATGCACCG CCACGGTTT TGGACAAAA TTATCCACTG ACCTTATTAA GAACCAGTGT 1500
GTCAATTTTA ATTTTAAATG ACTCACTGGT ACTGGTGTG TAACTCCTTC TTCAAAGAGA TTTCAACCAT TTCAACAATT TGGCCGTGAT GTTTCTGATT 1600
TCACTGATTC CCACCATCAT CACCATCACT AAggatcc
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(C)

ER-mCherry-S1-2

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gctagcATGC TGCTATCCGT GCCGTTGCTG CTCGGCCTCC TCGGCCTGGC CGTCGCCGGA CCGGTCGCCA CCATGGTGAG CAAGGGCGAG GAGGACCAGA 100
TGGCCATCAT CAAGGAGTTC ATGCGCTTCA AGGTGCACAT GGAGGGCTCC GTGAACGGCC ACGAGTTCGA GATCGAGGGC GAGGGCGAGG GCCGCCCTA 200
CGAGGGCACC CAGACCGCCA AGCTGAAGGT GACCAAGGGT GGCCCCCTGC CCTTCGCCCTG GGACATCCTG TCCCCTCAGT TCATGTACGG CTCCAAGGCC 300
TACGTGAAGC ACCCCGCCGA CATCCCCGAC TACTTGAAGC TGCTCTTCCC CGAGGGCTTC AAGTGGGAGC GCGTGATGAA CTTGAGGAC GCGGGCTGG 400
TGACCGTGAC CCAGGACTCC TCCTGCAGG ACGGCGAGTT CATCTACAAG GTGAAGCTGC GCGGCACCAA CTCCCCTCC GACGGCCCGG TAATCGAGAA 500
GAAGACCATG GGCTGGGAGG CCTCCTCCGA GCGGATGTAC CCCGAGGACG GCGCCCTGAA GGGCGAGATC AAGCAGAGGC TGAAGCTGAA GGACGGCGGC 600
CACTACGACG CTGAGGTCAA GACCACCTAC AAGGCCAAGA AGCCCGTGCA GCTGCCCGGC GCCTACAACG TCAACATCAA GTTGGACATC ACCTCCACA 700
ACGAGGACTA CACCATCGTG GAACAGTACG AACGCGCCGA GGGCCGCCAC TCCACCGGGC GCATGGACGA GCTGTACAAG TCCGGACTCA GATCTCGAGC 800
TTCTTCACT GTAGAAAAAG GAATCTATCA AACTTCTAAC TTTAGAGTCC AACCAACAGA ATCTATTGTT AGATTCCCTA ATATTACAAA CTTGTGCCCT 900
TTTGGTGAAG TTTTAAATGC CACCAGATTT GCATCTGTTT ATGCTTGGAA CAGGAAGAGA ATCAGCAACT GTGTTGCTGA TTATTCTGTG CTATATAAAT 1000
CCGCATCATT TTCACCTTT AAGTGTTATG GAGTGTCTCC TACTAAATTA AATGATCTCT GCTTTACTAA TGCTATGCA GATTCTTTG TAATTAAGAG 1100
TGATGAAGT AGACAAATC CTCCAGGGCA AACTGGAAAG ATTGCTGATT ATAATTATAA ATTACCAGAT GATTTTACAG GTTGCAGTAT AGCTTGAAT 1200
TCTAACATC TTGATCTTAA GGTGGTGGT AATTATAAAT ACCTGTATAG ATTTGTTAGG AAGTCTAATC TCAAACCTTT TCGAGGATAT ATTTCAACTG 1300
AAATCTATCA GGCCGGTAGC ACACCTTGTA ATGGTGTGTA AGGTTTTAAT TGTTACTTTC CTTTACAATC ATATGGTTTC CAACCCACTA ATGGTGTG 1400
TTACCAACCA TACAGAGTAG TAGTACTTTC TTTTGAACCT CTACATGCAC CAGCAACTGT TGTGGACCT AAAAAGTCTA CTAATTTGGT TAAAAACAAA 1500
TGTGTCAATT TCAACTTCAA TGGTTTAAAC GGCACAGGTG TTCTTACTGA GTCTAACAAA AAGTTTCTGC CTTTCCAACA ATTTGGCAGA GACATTGCTG 1600
ACACTACTGA TGCTCACCAT CATCACCATC ACTAAggatc c
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