

Electronic Supplementary Material

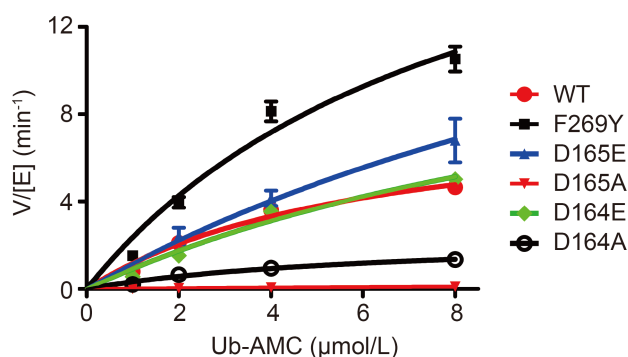
Structural and mutational analysis of the interaction between the Middle-East respiratory syndrome coronavirus (MERS-CoV) papain-like protease and human ubiquitin

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Supplemental Figure S1. Kinetics of Ub-AMC hydrolysis by MERS-CoV PL^{pro} (WT) and its variants. Wild-type: WT; reaction rate: V (unit: μmol/L/min); enzyme concentration: [E] (unit: μmol/L).

Supplementary Table 1. All primers of MERS-CoV PL^{pro} mutants

	Primers
C111S	5' - CAAATTGAGTGATAATAATTCTTATCTTAATGC 3' - CATAATAACTGCATTAAGATAAGAATTATTATCACTC
F269Y	5' - GTAGCATTTAATGTCTATCAGGGCATTGAAACG 3' - CGTTTCAATGCCCTGATAGACATTAAATGCTAC
D165E	5' - GGTGCTCCAGATGAGGCCTCTCGGTTACTT 3' - AAGTAACCGAGAGGCCTCATCTGGAGCACC
D165A	5' - GGTGCTCCAGATGCTGCCTCTCGGTTACTT 3' - AAGTAACCGAGAGGCAGCATCTGGAGCACC
D164E	5' - ACATTTGGTGCTCCAGAGGATGCCTCTCGGTTA 3' - TAACCGAGAGGCATCCTCTGGAGCACCAAATGT
D164A	5' - ACATTTGGTGCTCCAGCTGATGCCTCTCGGTTA 3' - TAACCGAGAGGCATCAGCTGGAGCACCAAATGT