

## Supplementary Materials

### **Thiopurine analogues and mycophenolic acid synergistically inhibit the papain-like protease of Middle East respiratory syndrome coronavirus**

Kai-Wen Cheng<sup>1</sup>, Shu-Chun Cheng<sup>2</sup>, Wei-Yi Chen<sup>3</sup>, Min-Han Lin<sup>1</sup>, Shang-Ju

Chuang<sup>1</sup>, I-Hsin Cheng<sup>3</sup>, Chiao-Yin Sun<sup>2,\*</sup>, and Chi-Yuan Chou<sup>1,\*</sup>

<sup>1</sup>Department of Life Sciences and Institute of Genome Sciences, National Yang-Ming

University, Taipei 112, Taiwan, <sup>2</sup>Department of Nephrology, Chang-Gung Memorial

Hospital, Keelung 204, Taiwan, <sup>3</sup>Institute of Biochemistry and Molecular Biology,

National Yang-Ming University, Taipei 112, Taiwan

**Running title:** Pre-existing drugs is able to synergistically inhibit MERS-CoV

papain-like protease

---

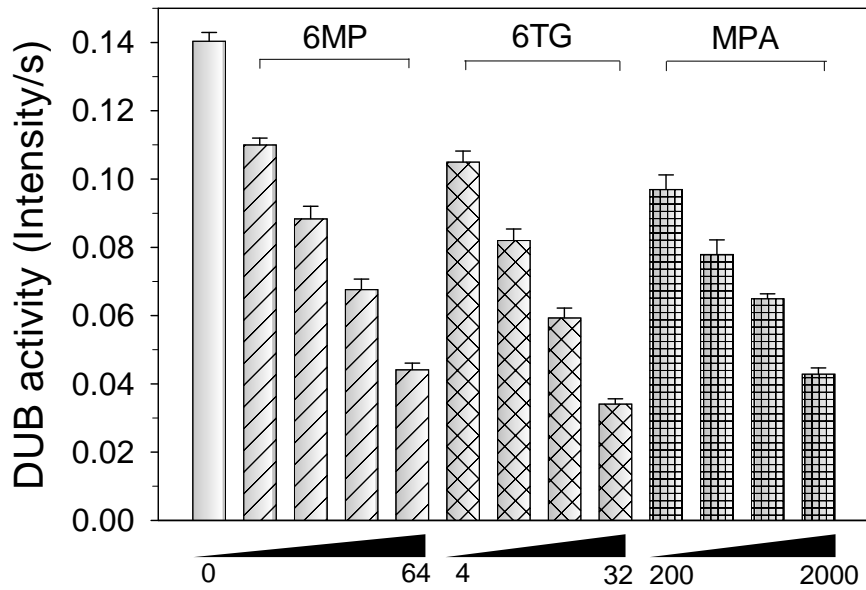
\*Correspondence information for Dr. Chi-Yuan Chou, 155 Li-Nong St., Sec. 2, Taipei

112, Taiwan, R.O.C., Phone: +886-2-28267168, FAX: +886-2-28202449, E-mail:

[cychou@ym.edu.tw](mailto:cychou@ym.edu.tw) and Dr. Chiao-Yin Sun, 222, Mai-Chin Rd., Keelung 204,

Taiwan, R. O. C., Phone: +886-2-24313131 ext. 3170, FAX: +886-2-24335342,

E-mail: [fish3970@gmail.com](mailto:fish3970@gmail.com)



Supplementary Fig. 1. **Inhibition of MERS-CoV PL<sup>pro</sup> DUB activity by 6MP, 6TG, or mycophenolic acid.** The DUB activity of MERS-CoV PL<sup>pro</sup> in the presence of 6MP (8-64 μM), 6TG (4-32 μM) or mycophenolic acid (200-2000 μM) were measured, respectively. The concentration of Ub-AFC used for the assay was 0.5 μM, while the concentration of MERS-CoV PL<sup>pro</sup> was 1 μM, respectively. MPA: mycophenolic acid.