

Erratum to "Small Molecule Inhibitors of Middle East Respiratory Syndrome Coronavirus Fusion by Targeting Cavities on Heptad Repeat Trimers" [*Biomol Ther* 28(4), 311-319 (2020)]

Mahmoud Kandeel^{1,2,*}, Mizuki Yamamoto^{3,4}, Abdulla Al-Taher¹, Aya Watanabe⁴, Kentaro Oh-hashii⁵, Byoung Kwon Park⁶, Hyung-Joo Kwon^{6,*}, Jun-ichiro Inoue^{3,4} and Mohammed Al-Nazawi¹

¹Department of Biomedical Sciences, College of Veterinary Medicine, King Faisal University, Al-Ahsa 31982, Saudi Arabia

²Department of Pharmacology, Faculty of Veterinary Medicine, Kafrelsheikh University, Kafrelsheikh 33516, Egypt

³Research Center for Asian Infectious Diseases, Institute of Medical Science, The University of Tokyo, Tokyo 108-8639,

⁴Division of Cellular and Molecular Biology, Department of Cancer Biology, Institute of Medical Science, The University of Tokyo, Tokyo 108-8639,

⁵Department of Chemistry and Biomolecular Science, Faculty of Engineering, Gifu University, Gifu 501-1193, Japan

⁶Department of Microbiology, Hallym University College of Medicine, Chuncheon 24252, Republic of Korea

The authors request to correct the plaque photos in Fig. 3A on page 317, Table 1 on page 314-316 and the 1st-6th line of left column of Results section on page 317. The authors conducted multiple experiments simultaneously to examine the effects of different treatments on MERS-CoV. During the manuscript preparation, the exact images of PBS and DMSO controls were unintentionally misused. As the overall patterns of plaque formation in the original figure and the revised one are similar, this error does not affect the conclusion of the article. However, the authors apologize for this accidental error and inconvenience.

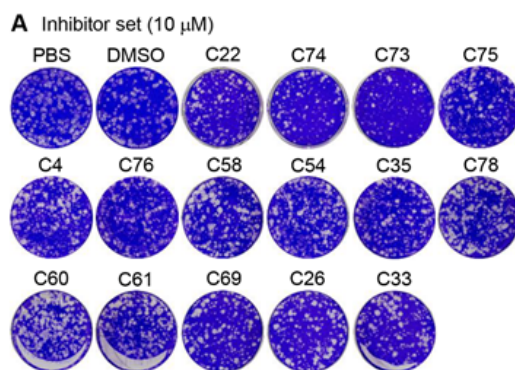


Fig. 3. (A) Screening of the inhibitors against MERS-CoV infection. The plaque formation assay was performed with 15 compounds. Prior to MERS-CoV infection, MERS-CoV was incubated with each compound (10 μ M) for 30 min at 37°C and then added to Vero cells to infect with MERS-CoV. After 4 days of incubation in DMEM/F12 containing 0.6% oxid agar, the plaques were observed by staining with crystal violet and then counted.

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***Corresponding Authors**

E-mail: mkandeel@kfu.edu.sa (Kandeel M),

hjoonwon@hallym.ac.kr (Kwon HJ)

Tel: +966-568918734 (Kandeel M), +82-33-248-2635 (Kwon HJ)

Fax: +966-13-589-6617 (Kandeel M), +82-33-241-3640 (Kwon HJ)

The 1st-6th line of left column of Results section on page 317:

At 10 μ M concentration, 13 compounds were able to prevent MERS-CoV plaques formation by 2.4-59.2% (Table 1). The strongest compound was no. 74, which produced 59.2% reduction in MERS-CoV plaques formation. Compounds 73, 22, and 76 produced 49.8%, 36.5%, and 34.6% inhibition (Fig. 3).

Table 1. Chemical structure of compounds and their inhibitory properties on MERS-CoV shown in Fig. 3A using plaques inhibition assay. The cytotoxicity values represent the average from three different cultures. Cell viability measurement was based on mitochondrial activity

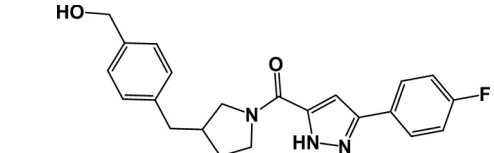
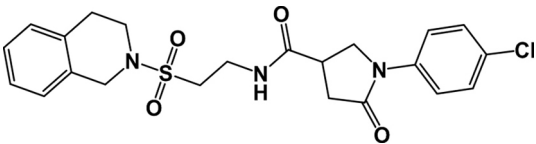
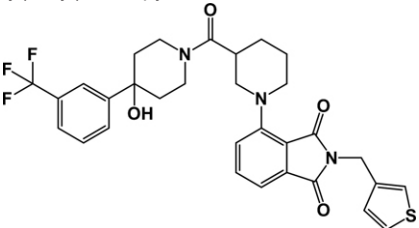
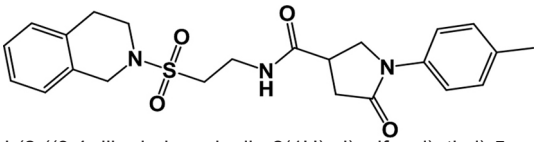
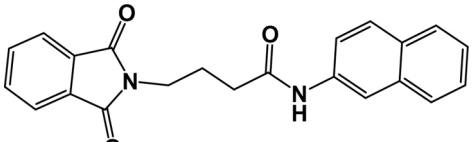
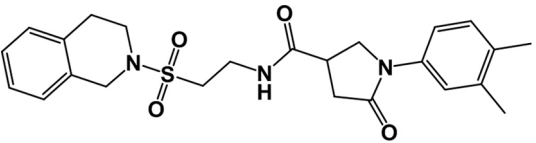
Compound no	ID	Chemical name	Total plaque No.	% Plaque	Cytotoxicity against HEK cells
		PBS	496	117.4	
		10% DMSO	422	100	
22	24071746	 {4-[(1-[[3-(4-fluorophenyl)-1H-pyrazol-5-yl]carbonyl]pyrrolidin-3-yl)methyl]phenyl}methanol	268	63.5	0.596
74	F2282-0127*	 1-(4-chlorophenyl)-N-(2-((3,4-dihydroisoquinolin-2(1H)-yl)sulfonyl)ethyl)-5-oxopyrrolidine-3-carboxamide	172	40.8	0.568
73	98931397	 4-[3-({4-hydroxy-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl}carbonyl)-1-piperidinyl]-2-(3-thienylmethyl)-1H-isoindole-1,3(2H)-dione	212	50.2	0.602
75	F2282-0124*	 N-(2-((3,4-dihydroisoquinolin-2(1H)-yl)sulfonyl)ethyl)-5-oxo-1-(p-tolyl)pyrrolidine-3-carboxamide	332	78.7	0.604
4	6505627	 4-(1,3-dioxo-1,3-dihydro-2H-isoindol-2-yl)-N-2-naphthylbutanamide	316	74.9	0.603
76	F2282-0128*	 N-(2-((3,4-dihydroisoquinolin-2(1H)-yl)sulfonyl)ethyl)-1-(3,4-dimethylphenyl)-5-oxopyrrolidine-3-carboxamide	276	65.4	0.520

Table 1. Continued 1

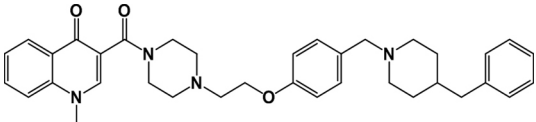
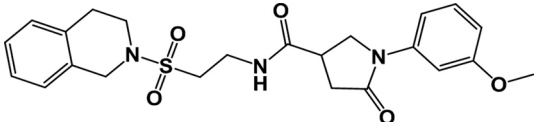
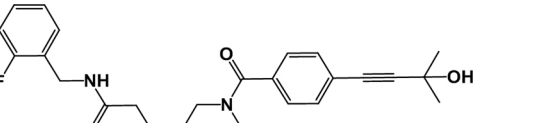
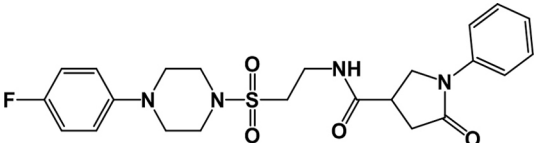
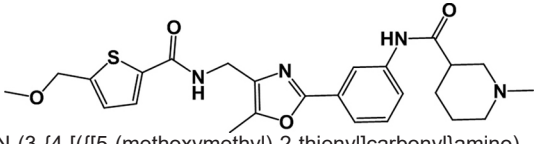
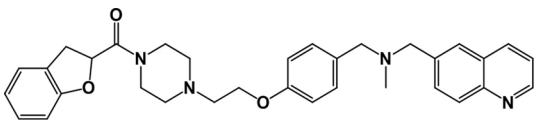
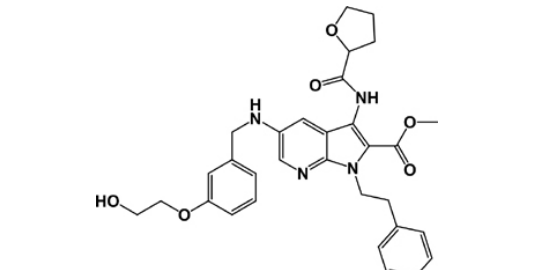
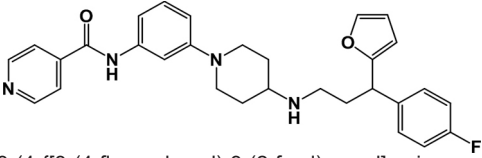
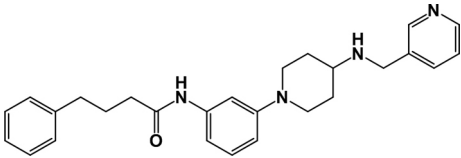
Compound no	ID	Chemical name	Total plaque No.	% Plaque	Cytotoxicity against HEK cells
58	57295921	 3-[[4-(2-[[4-(4-benzyl-1-piperidinyl)methyl]phenoxy]ethyl)-1-piperazinyl]carbonyl]-1-methyl-4(1H)-quinolinone	304	72.0	0.602
54	F2282-0139*	 N-(2-((3,4-dihydroisoquinolin-2(1H)-yl)sulfonyl)ethyl)-1-(3-methoxyphenyl)-5-oxopyrrolidine-3-carboxamide	392	92.9	0.578
35	30625545	 N-(2-fluorobenzyl)-3-{1-[4-(3-hydroxy-3-methyl-1-butyn-1-yl)benzoyl]-3-piperidinyl}propanamide	368	87.2	0.580
78	F2068-0373	 N-(2-((4-(4-fluorophenyl)piperazin-1-yl)sulfonyl)ethyl)-5-oxo-1-phenylpyrrolidine-3-carboxamide	396	93.8	0.574
26	25947446	 N-(3-(4-(((5-(methoxymethyl)-2-thienyl)carbonyl)amino)methyl)-5-methyl-1,3-oxazol-2-yl)phenyl)-1-methyl-3-piperidinecarboxamide	468	110.9	0.587
60	66172782	 (4-(2-[4-(2,3-dihydro-1-benzofuran-2-yl)carbonyl]-1-piperazinyl)ethoxy)benzyl)methyl(6-quinolinylmethyl)amine	452	107.1	0.572
69	78170314	 methyl 5-[[3-(2-hydroxyethoxy)benzyl]amino]-1-(2-phenylethyl)-3-[[tetrahydro-2-furanylcarbonyl]amino]-1H-pyrrolo[2,3-b]pyridine-2-carboxylate	388	91.9	0.529

Table 1. Continued 2

Compound no	ID	Chemical name	Total plaque No.	% Plaque	Cytotoxicity against HEK cells
61	67801543		316	74.9	0.173
33	29194995		412	97.6	0.588

*Compounds purchased from Life Chemicals Inc (Niagara-on-the-Lake, Canada). The rest of compounds were purchased from Chembridge (San Diego, CA, USA).