From: (b) (6)

Sent: Tue, 25 Feb 2020 13:04:40 -0500 **To:** Cassetti, Cristina (NIH/NIAID) [E]

Subject: Fwd: DDP4 Inhibitors and ACE2 Inhibitors :: Spike Protein Binding in MERS and

SARS

Please handle. Thanks

Begin forwarded message:

From: JoelMeyer (b) (6)> **Date:** February 25, 2020 at 12:32:24 PM EST

To: "Fauci, Anthony (NIH/NIAID) [E]" < (b) (6)

Subject: DDP4 Inhibitors and ACE2 Inhibitors :: Spike Protein Binding in

MERS and SARS

Dear Dr. Fauci.

Is it possible that DDP4 and ACE2 inhibitors would be effective in preventing coronavirus entry and thereby 'de-rail' the infectious cycle?

Thank you for your work and guidance to NIAID!

(b) (6)

Sincerely,

Joel R.L. Meyer

(b) (6)

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5891363/

"Coronavirus entry is initiated by the binding of the spike protein (S) to cell receptors, specifically, dipeptidyl peptidase 4 (DDP4) and angiotensin converting enzyme 2 (ACE2) for MERS-CoV and SARS-CoV, respectively [1–5]"

...

References

- 1. Masters, PS., Perlman, S. Coronaviridae in Field's Virology. Knipe, DM., Howley, PM., editors. Vol. 1. Lippincott, Williams &Wilkins; Philadelphia: 2013. p. 825-858.
- 2. Coleman CM, Frieman MB. Coronaviruses: important emerging human pathogens. J Virol. 2014; 88:5209–5212. [PubMed: 24600003]
- 3. De Wit E, van Doremalen N, Falzarano D, Munster VJ. SARS and MERS: recent insights into emerging coronaviruses. Nature Rev Microbiol. 2016; 14:523–534. [PubMed: 27344959]