

## Catalog # 10-4965 GRL-0617

CAS# 1093070-16-6 5-Amino-2-methyl-N-(1R-naphthalen-1-yl-ethyl)benzamide Lot # FBA6214

GRL-0617 is a potent ( $IC_{50}$  = 600 nM) noncovalent inhibitor of severe acute respiratory syndrome-coronavirus papain-like protease (SARS-CoV PLpro). GRL0617 inhibited SARS-CoV viral replication in Vero E6 cells with no cytotoxicity ( $EC_{50}$  = 15  $\mu$ M). Inactive against human DUB-like proteases HAUSP, USP18, UCH-L1, UCH-L3, and PLP2. GRL-0617 was recently shown to block SARS-CoV2 replication in CaCo-2 cells ( $IC_{50}$  = 1.50  $\mu$ M for SCoV2-PLpro), impair the virus-induced cytopathogenic effect, and maintain the antiviral interferon pathway.<sup>3</sup>

## References:

- 1) Ratia et al. (2008), A noncovalent class of papain-like protease/deubiquitinase inhibitors blocks SARS virus replication; Proc. Natl. Acad. Sci. USA, **105** 16119
- Ghosh et al. (2009), Structure-Based Design, Synthesis, and Biological Evaluation of a Series of Novel and Reversible Inhibitors for the Severe Acute Respiratory Syndrome-Coronavirus Papain-Like Protease; J. Med. Chem. 52 5228
- 3) Shin et al. (2020), Papain-like protease regulates SARS-CoV2 viral spread and innate immunity; Nature 587 657

## **PHYSICAL DATA**

Molecular Weight: 304.39

Molecular Formula: C<sub>20</sub>H<sub>20</sub>N<sub>2</sub>O

Purity: 99% by HPLC

NMR: (Conforms)

DMSO (>30 mg/ml) or Ethanol (15 mg/ml)

Physical Description: Beige solid

Solubility:

Storage and Stability: Store as supplied desiccated at -20°C for up to 1 year from the date of purchase. Solutions in

DMSO or ethanol may be stored at -20°C for up to 1 month.

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