



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

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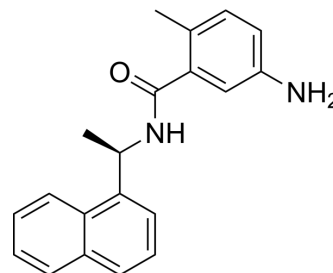
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## GRL0617

|                           |  |       |         |
|---------------------------|--|-------|---------|
| <b>Cat. No.:</b>          | HY-117043  |       |         |
| <b>CAS No.:</b>           | 1093070-16-6                                     |       |         |
| <b>Molecular Formula:</b> | C <sub>20</sub> H <sub>20</sub> N <sub>2</sub> O |       |         |
| <b>Molecular Weight:</b>  | 304.39   |       |         |
| <b>Target:</b>            | Deubiquitinase; SARS-CoV                         |       |         |
| <b>Pathway:</b>           | Cell Cycle/DNA Damage; Anti-infection            |       |         |
| <b>Storage:</b>           | Powder   | -20°C | 3 years |
|                           |  | 4°C   | 2 years |
|                           | In solvent                                       | -80°C | 2 years |
|                           |  | -20°C | 1 year  |



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 125 mg/mL (410.66 mM; Need ultrasonic)

| Concentration | Mass      |            |            |
|---------------|-----------|------------|------------|
|               | 1 mg      | 5 mg       | 10 mg      |
| 1 mM          | 3.2853 mL | 16.4263 mL | 32.8526 mL |
| 5 mM          | 0.6571 mL | 3.2853 mL  | 6.5705 mL  |
| 10 mM         | 0.3285 mL | 1.6426 mL  | 3.2853 mL  |

Please refer to the solubility information to select the appropriate solvent.

#### In Vivo

- Add each solvent one by one: 5% DMSO >> 40% PEG300 >> 5% Tween-80 >> 50% saline  
Solubility: 2.5 mg/mL (8.21 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: ≥ 2.08 mg/mL (6.83 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 2.08 mg/mL (6.83 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 2.08 mg/mL (6.83 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

GRL0617 is a selective and competitive noncovalent inhibitor of severe acute respiratory syndrome (SARS-CoV) papain-like protease (PLpro), with an IC<sub>50</sub> of 0.6 μM and a K<sub>i</sub> value of 0.49 μM. GRL0617 also inhibits SARS-CoV with an EC<sub>50</sub> of 14.5 μM. GRL0617 can be used for the research of severe acute respiratory syndrome<sup>[1]</sup>.

#### IC<sub>50</sub> & Target

IC<sub>50</sub>: 0.6 μM (SARS-CoV PLpro)<sup>[1]</sup>

## In Vitro

GRL0617 (0-50  $\mu$ M; 48 h) exhibits significantly antiviral activity in SARS-CoV infected Vero E6 cells<sup>[1]</sup>. MCE has not independently confirmed the accuracy of these methods. They are for reference only.  
Cell Viability Assay<sup>[1]</sup>

|                  |  |
|------------------|--|
| Cell Line:       | Vero E6 cells  |
| Concentration:   | 0, 10, 20, 30, 40 and 50 $\mu$ M   |
| Incubation Time: | 48 hours   |
| Result:          | Showed significant antiviral activity in SARS-CoV infected Vero E6 cells with an EC <sub>50</sub> value of 14.5 $\mu$ M. |

## CUSTOMER VALIDATION

- Nat Commun. 2021 Jan 20;12(1):488.
- Nucleic Acids Res. 2021 Jan 8;49(D1):D11113-D1121.
- Acta Pharm Sin B. 2021 Jan;11(1):237-245.
- Cell Chem Biol. 2022 Jun 9;S2451-9456(22)00201-X.
- Cell Chem Biol. 2021 Apr 27;S2451-9456(21)00213-0.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

[1]. Ratia K, et al. A noncovalent class of papain-like protease/deubiquitinase inhibitors blocks SARS virus replication. Proc Natl Acad Sci U S A. 2008 Oct 21;105(42):16119-24.

**Caution: Product has not been fully validated for medical applications. For research use only.**

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