

## COVID-19 Antiviral Compounds

**Track Code:** 2022-GHOS-69724

**Categories:**

- Chemistry and Chemical Analysis
- Pharmaceuticals

**Keywords:**

- 3C-like protease
- 3CL protease
- 3CLpro inhibitor
- COVID-19
- Infectious Disease
- Pharmaceuticals
- SARS-CoV-2

Researchers at Purdue University have developed compounds that inhibit SARS-CoV-2 replication and outperform an approved therapy. Pfizer's Paxlovid and Merck's Molnupiravir are the only antiviral drugs available for individuals with severe COVID-19 symptoms. Purdue researchers are designing more potent compounds to address the continued need for effective COVID-19 therapies. The antiviral drugs developed by the Purdue researchers are 3CLprotease inhibitors that potently block SARS-CoV-2 replication. The best of these compounds are more potent than Pfizer's Paxlovid in enzyme inhibition and antiviral assays. The researchers expect the compounds to have drug-like properties.

**Technology Validation:** Enzyme inhibition and antiviral assays

**Advantages:**

- Effective inhibition of 3CLpro enzyme
- Potent antiviral activity

**Applications:**

- COVID-19 treatment

**People:**

- Ghosh, Arun K (Project leader)
- Sharma, Ashish

**Intellectual Property:**

**Application Date:** December 7, 2022

**Type:** PCT-Gov. Funding

**Country of Filing:** WO

**Patent Number:** (None)

**Issue Date:** (None)

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