



## Patent Status

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With 460 years of history, the University of Geneva is recognized today as one of the top 100 universities in the world. At the forefront of research in many disciplines, it is one of the most important innovation players in Europe.

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## NOVEL ANTI-VIRAL AGENTS

### Background

Many viruses are known to infect cells through the host's endocytic pathway. In this context the chaperonin containing complex CCT/TRiC was shown to be required in the replication of eukaryotic viruses such as hepatitis B and C, Epstein Barr or influenza virus (Knowlton et al., 2018).

### Description of the invention

Researchers of the University of Geneva have discovered that a class of lipids inhibits the activity of the CCT/TRiC complex and can thereby protect against viruses relying on this complex to allow replication.

### Therapeutic potential - Applications

The novel lipid-based anti-viral agents have been shown to be effective against vesicular stomatitis virus (VSV).

Based on the known mechanism of infection of this virus, the novel anti-viral agents are expected to be effective against many other viruses that are relevant for human or veterinary health:

- Hepatitis B and C
- Influenza
- Herpes Simplex
- Epstein-Barr
- Rabies
- Reoviruses
- Other non-enveloped viruses

### Advantages

- Active against a broad spectrum of viruses
- Active well below toxic concentration
- Could be used as a cure or in prevention
- Small molecule, therefore easy to produce and to administer

**The University of Geneva seeks to license this technology exclusively to a biopharma company.**



**Keywords:** anti-viral, endocytic pathway, CCT/TRiC, Vesicular stomatitis, VSV, Hepatitis, Influenza, Herpes simplex, Epstein-Barr, Rabies, Reoviruses, non-enveloped viruses