

Compound for prevention or treatment of Rhinovirus infection

The agent presented herein is an effective and safe sugar-derivative, for treatment of common colds induced by human rhinoviruses. It targets the life-cycle of the virus without major side effects for the patient, and could be applied in a nasal spray as a single compound medicament or in combination with already existing, conventional decongestant formulations of sprays against common cold.

BACKGROUND

Rhinoviruses are the major causative agent of the common cold and other respiratory tract infections. While billions of infections occur every year with patients suffering from symptoms such as runny nose, nasal congestion, sore throat, headache, and sleep deprivation, effective treatment or prevention strategies without risky side effects are lacking. Existing treatments focus on alleviating the symptoms of the infection, while antiviral agents are not available and the development of a vaccine has been unsuccessful so far because of the large number of rhinovirus serotypes.

TECHNOLOGY

Infection with rhinoviruses induces metabolic alterations in infected cells and a pronounced reprogramming of host cell metabolism. The proposed agent to treat rhinovirus infections is a simple sugar-derivative that prevents those metabolic changes, thus starving viral infection. The compound targets the cause of the disease by disrupting rhinovirus replication both *in vitro* and *in vivo*, thus promising a shorter duration of the infection with alleviation of symptoms.



BENEFITS

- Anti-viral agent stops virus proliferation
- Efficient & safe agent
- Low cost of compound
- High compatibility with other therapies
- Global market
- Ready-to-use medication
- Low probability of resistance development

REFERENCE:

657.17

APPLICATIONS:

Rhinovirus infections
Common cold treatment

AVAILABLE FOR:

License agreement

DEVELOPMENT STATUS:

Established treatment strategy; mouse model

IPR:

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