

November 1, 2022



Enzymatica
THE SCIENCE THAT PROTECTS

Non-regulatory press release

New study confirms ColdZyme stops viruses causing Covid-19 from adhering to human respiratory cells

A study published in the journal *Respiratory Research* confirms the previous findings from a research group at the Medical University of Innsbruck, Austria: The prescription free mouth spray ColdZyme blocks the widespread and highly transmissible omicron variants BA.4 and BA.5 from adhering to and infecting human cells. According to the researchers, this opens for the possibility that ColdZyme can be applied in the prevention of SARS-CoV-2 spreading.

The world has started to breathe more easily as vaccine innovation protects millions worldwide from the many infectious viruses that cause Covid-19. But as upper respiratory viral threats remain in the air, researchers continue to search for additional ways of maintaining and enhancing the science gains of the past two years. A study published in the journal *Respiratory Research* now answers this challenge in a significant and novel way by introducing a dimension of protection, one that physically stops airborne viruses from initiating infection.

According to researchers at the Medical University of Innsbruck, Austria, the prescription free mouth spray ColdZyme stops viruses from attaching to human respiratory surfaces. This extended research highlights the blocking ability of ColdZyme to block the the latest Omicron BA.4/5 variants, thereby protecting human cells from invasive viral attack and invasion that leads to infection. This builds upon previous data from the same research team, proving that ColdZyme protects against the original BA.1 omicron variant as well as other SARS-CoV-2 variants.

“We have demonstrated that ColdZyme mouth spray blocks Omicron BA.4/5 and BA.1 from infecting highly differentiated, mucus-producing and ciliated primary human bronchial airway epithelial cell cultures. The results from the study show that ColdZyme protects from BA.1 and BA.4/5 infections, maintains epithelial integrity upon SARS-CoV-2 infection, and that viral loads are significantly decreased by prophylactic application of ColdZyme mouth spray. Although the results from our lifelike *in-vitro* 3D models are not directly translatable to *in-vivo* efficacy, they open the exciting possibility that ColdZyme can be applied in the prevention of SARS-CoV-2 transmission and spread”, said Professor Doris Wilflingseder, head of the research group.

“ColdZyme has now been proven to block 11 different upper respiratory viruses, including several variants of SARS-CoV-2. We see it as our obligation to society to continue exploring these results to establish the effect in humans. ColdZyme could very likely be an easy-to-use self-administered means to provide people with additional protection against omicron variants and other coronaviruses, as an addition to the recommended vaccines”, said Claus Egstrand, CEO of Enzymatica.

More information about the study: [ColdZyme® protects airway epithelia from infection with BA.4/5 | Respiratory Research | Full Text \(biomedcentral.com\)](#)

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Enzymatica AB develops and sells health products mainly to treat diseases and symptoms in the upper respiratory tract. The products are based on a barrier technology that includes marine enzymes with unique properties. The company's first product is the medical device product ColdZyme®, a mouth spray for colds. The product has been launched in about 30 markets on four continents. The strategy is to continue to grow by developing more health products, strengthening the company's position in existing markets and expanding into new geographic markets through established partners. The company is headquartered in Lund and is listed on Nasdaq First North Growth Market. For more information, please visit www.enzymatica.com.