

## RECOMBINANT PROTEIN FOR THE TREATMENT OF SARS-COV-2 INFECTION

### Description:

The advances made in the therapy of viral diseases are of lesser magnitude than those that have been achieved for the treatment of bacterial infections. Viruses are intracellular parasites that use the metabolic machinery of the infected host cell. Therefore, the development of antivirals presents a series of difficulties associated with this obligate parasitic character. It is difficult to achieve adequate antiviral activity without affecting the metabolism of the host cell and without causing negative effects on other uninfected cells in the body. IFN $\beta$  exerts its biological activity through the interaction with the IFNAR surface receptor formed by two subunits, IFNAR1 and IFNAR2. The IFNAR2 subunit of the receptor undergoes processing that gives rise to three different isoforms, of which sIFNAR2 has been suggested to have the capacity to neutralize the binding of IFN $\beta$  to the IFNAR2 receptor. In this way it could exert modulating functions depending on the concentration at which it is found. The researchers have verified the antiviral effect of the recombinant protein on SARS-CoV-2, which is why they propose its use in the preparation of an antiviral treatment.

### Keywords:

[Recombinant Protein](#), [Antiviral Therapy](#), [Sars-Cov-2](#), [Coronavirus](#), [Infectious Diseases](#), [Ifnar2](#)

### Sectors:

[Biotechnology](#), [Health](#)

### Areas:

[Health Sciences](#), [Therapeutics](#)



### Advantages:

This invention constitutes a new strategy in the treatment of diseases caused by the SARS-CoV-2 virus. In addition, its safety has been proven through toxicity studies in an in vivo model.

### Uses and Applications:

This invention falls within the pharmaceutical sector, specifically in antiviral treatments. Currently, research is important on antiviral drugs that could be useful in the treatment of COVID-19 caused by the SARS-CoV2 coronavirus.

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