Spike protein gets N-glycosylated

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Introduction

Reactome is open-source, open access, manually curated and peer-reviewed pathway database. Pathway annotations are authored by expert biologists, in collaboration with Reactome editorial staff and cross-referenced to many bioinformatics databases. A system of evidence tracking ensures that all assertions are backed up by the primary literature. Reactome is used by clinicians, geneticists, genomics researchers, and molecular biologists to interpret the results of high-throughput experimental studies, by bioinformaticians seeking to develop novel algorithms for mining knowledge from genomic studies, and by systems biologists building predictive models of normal and disease variant pathways.

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Literature references


Reactome database release: 77

This document contains 1 reaction (see Table of Contents)
Spike protein gets N-glycosylated

Stable identifier: R-HSA-9694793

Type: omitted

Compartments: endoplasmic reticulum lumen

Diseases: COVID-19

Glycosyltransferases in the endoplasmatic reticulum are responsible for the attachment of numerous high-mannose N-glycans on the SARS-CoV-2 spike protein. After virion assembly and release these glycosidations are required for fusion with host cells (Watanabe et al, 2020, Breuer et al, 2001).

O-glycosylations do occur on the Spike protein with an average overall frequency per site of less than 50 percent (Sanda et al, 2020).

Literature references


Editions

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