3a localizes to the cell membrane

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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)

https://reactome.org
3a localizes to the cell membrane

**Stable identifier:** R-HSA-9694572

**Type:** omitted

**Compartments:** endoplasmic reticulum-Golgi intermediate compartment, plasma membrane

**Diseases:** COVID-19

**Inferred from:** 3a localizes to the cell membrane (Homo sapiens)

This COVID-19 event has been created by a combination of computational inference (see https://reactome.org/documentation/inferred-events) from SARS-CoV-1 data and manual curation, as described in the summation for the overall SARS-CoV-2 infection pathway.

As it contains cargo sorting motifs in its cytoplasmic domain, protein 3a gets localized by the cell's protein transport system to the cell membrane where it functions as an ion channel (Tan et al, 2004). This ion channel function is necessary for the protein's pro-apoptotic function (Chan et al, 2009)

**Literature references**


**Editions**

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<thead>
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<th>Action</th>
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