

# Association with M1 at 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

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Reactome database release: 88

This document contains 1 reaction ([see Table of Contents](#))

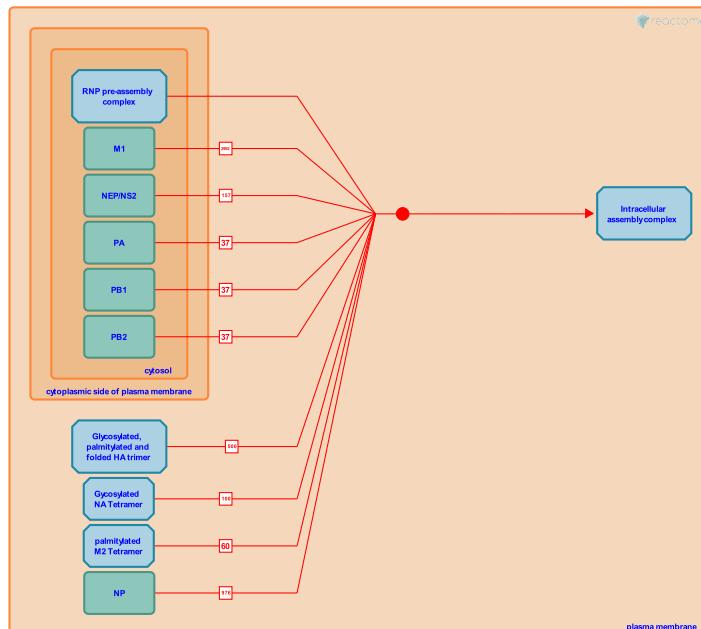
## Association with M1 at cell membrane [↗](#)

**Stable identifier:** R-HSA-195926

**Type:** binding

**Compartments:** cytosol, plasma membrane

**Diseases:** influenza



As influenza viruses bud from the plasma membrane of infected cells, complete virions are not seen inside cells. In polarized epithelial cells, assembly and budding of influenza occurs from the apical plasma membrane (Schmitt, 2004). For efficient assembly, all virion components must accumulate at the budding site, and it is believed that the viral glycoprotein accumulation determines the site of virus assembly and budding (Nayak, 2004). M1 is thought to be the bridge between the envelope glycoproteins and the RNPs for assembly (Schmitt, 2004). M2 is also required, because if it is not present RNPs are not packaged into budding virions (McCown, 2005), however its role is not known.

## Literature references

McCown, MF., Pekosz, A. (2005). The influenza A virus M2 cytoplasmic tail is required for infectious virus production and efficient genome packaging. *J Virol*, 79, 3595-605. [↗](#)

Schmitt, AP., Lamb, RA. (2004). Escaping from the cell: assembly and budding of negative-strand RNA viruses. *Curr Top Microbiol Immunol*, 283, 145-96. [↗](#)

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## Editions

2007-05-01	Authored	Marsh, G.
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