

# CLASP proteins and cargo are recruited to the nascent clathrin-coated pit

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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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Reactome database release: 70

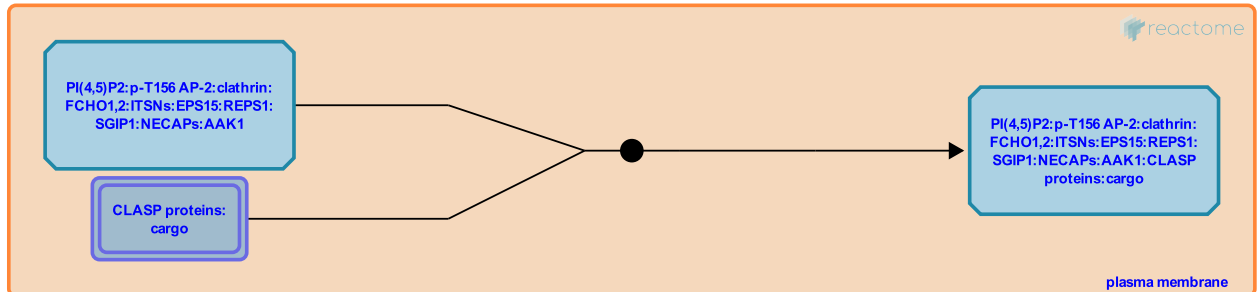
This document contains 1 reaction ([see Table of Contents](#))

## CLASP proteins and cargo are recruited to the nascent clathrin-coated pit [↗](#)

**Stable identifier:** R-HSA-8867756

**Type:** binding

**Compartments:** plasma membrane



CLASP proteins are recruited to nascent clathrin-coated pits (CCPs) through interactions with AP-2 and clathrin. Although in this pathway cargo recruitment is depicted as occurring after the recruitment of bulk AP-2 and clathrin, a number of studies suggest that they are largely recruited concomitantly (Liu et al, 2010; reviewed in McMahon and Boucrot, 2011). Concurrent interactions with sorting signals in cargo cytoplasmic tails and with clathrin and/or AP-2 ensure that CLASPs and cargo are incorporated into the emerging CCP (Schmid et al, 2006; Edeling et al, 2006; reviewed in Traub, 2009; Traub and Bonifacino, 2013; Kirchhausen et al, 2014). In addition, incorporation of CLASPs and cargo may play a role in regulating the timing and dynamics of endocytosis (Loerke et al, 2009; Mettlen et al, 2009; Soohoo et al, 2013; Mettlen et al, 2010; Puthenveedu et al, 2005).

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### Editions

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