L1 binds to AP-2 Clathrin complex

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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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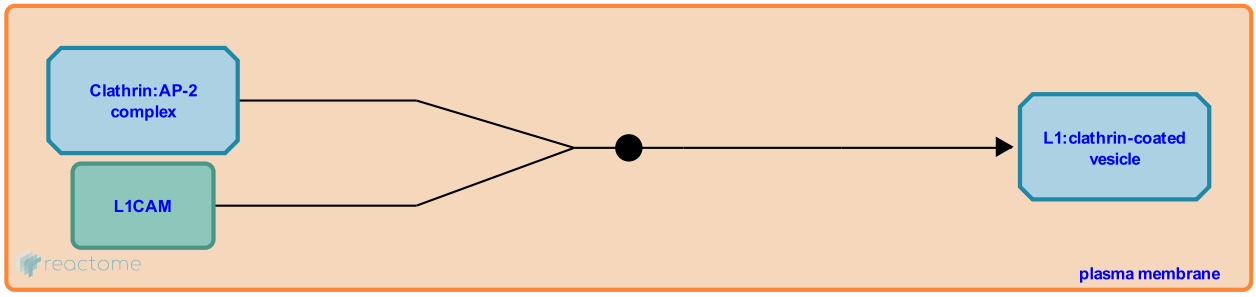
Stable identifier: R-HSA-392748

Type: binding

Compartments: plasma membrane



L1 in the C-domain membrane is internalized via clathrin mediated endocytosis. The assembly of clathrin coats at the plasma membrane depends on the adaptor complex AP-2 which is composed of two large chains (alpha and beta1 or beta2 adaptin), one medium (mu2) chain, and one small chain (sigma2). When dephosphorylated, the sorting signal/endocytic motif YRSLE sequence enables L1 to directly bind the mu2 subunit of AP-2, and concentrates L1 molecules in clathrin coated areas of the plasma membrane.

Literature references

Kamiguchi, H., Long, KE., Pendergast, M., Schaefer, AW., Rapoport, I., Kirchhausen, T. et al. (1998). The neural cell adhesion molecule L1 interacts with the AP-2 adaptor and is endocytosed via the clathrin-mediated pathway. *J Neurosci, 18*, 5311-21. ↗

Editions

2008-07-30	Authored, Edited	Garapati, P V.
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