

APP(672-713),APP(672-711) translocate from endosome lumen to extracellular region

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https://reactome.org

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

- Fabregat, A., Sidiropoulos, K., Viteri, G., Forner, O., Marin-Garcia, P., Arnau, V. et al. (2017). Reactome pathway analysis: a high-performance in-memory approach. *BMC bioinformatics*, 18, 142.
- Sidiropoulos, K., Viteri, G., Sevilla, C., Jupe, S., Webber, M., Orlic-Milacic, M. et al. (2017). Reactome enhanced pathway visualization. *Bioinformatics*, 33, 3461-3467.
- Fabregat, A., Jupe, S., Matthews, L., Sidiropoulos, K., Gillespie, M., Garapati, P. et al. (2018). The Reactome Pathway Knowledgebase. *Nucleic Acids Res, 46*, D649-D655.
- Fabregat, A., Korninger, F., Viteri, G., Sidiropoulos, K., Marin-Garcia, P., Ping, P. et al. (2018). Reactome graph database: Efficient access to complex pathway data. *PLoS computational biology, 14*, e1005968.

Reactome database release: 88

This document contains 1 reaction (see Table of Contents)

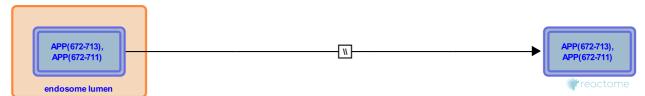
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APP(672-713),APP(672-711) translocate from endosome lumen to extracellular region **₹**

Stable identifier: R-HSA-6783332

Type: omitted

Compartments: endosome lumen, extracellular region



The Abeta peptides 42 and 40 (APP(672-713) and APP(673-711) respectively) are thought to be the main fibril-forming peptides implicated in neurodegenerative disorders. They translocate from the endosomal lumen to the extracellular region by an unknown mechanism (Qui et al. 2015, Baranello et al. 2015).

Literature references

Liu, Q., Qiu, T., Zhao, YF., Chen, YX., Li, YM. (2015). Aβ42 and Aβ40: similarities and differences. J. Pept. Sci.. ¬

Padmaraju, V., Lahiri, DK., Chopra, N., Sambamurti, K., Baranello, RJ., Pappolla, MA. et al. (2015). Amyloid-beta protein clearance and degradation (ABCD) pathways and their role in Alzheimer's disease. *Curr Alzheimer Res, 12*, 32-46.

Editions

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