

LGI1 binds ADAM11

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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

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

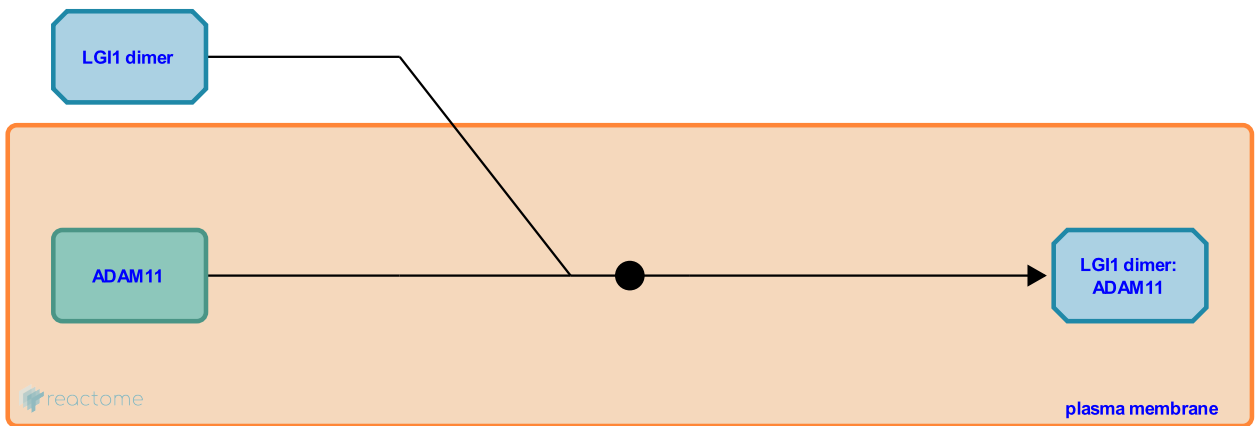
This document contains 1 reaction ([see Table of Contents](#))

LGI1 binds ADAM11 [↗](#)

Stable identifier: R-HSA-5682826

Type: binding

Compartments: plasma membrane, extracellular region



In addition to ADAM22 and ADAM23, LGI1 also binds to ADAM11 (Sagane et al. 2008). ADAM11 is essential for a proper neuronal function because ADAM11-deficient mice showed deficits in special learning, motor coordination and nociceptive response (Takahashi et al 2006a,b).

Literature references

Sugimoto, H., Sagane, K., Ishihama, Y. (2008). LGI1 and LGI4 bind to ADAM22, ADAM23 and ADAM11. *Int. J. Biol. Sci.*, 4, 387-96. [↗](#)

Editions

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