TXLNA (IL14) binds syntaxin1A

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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. ↗

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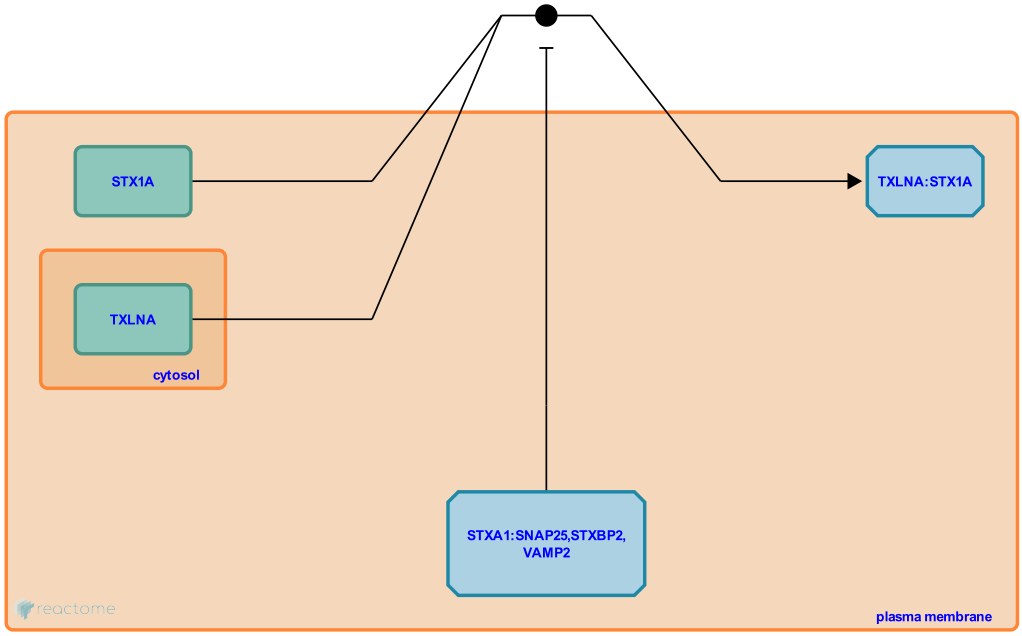
Stable identifier: R-HSA-449117

Type: binding

Compartments: extracellular region, plasma membrane



Interleukin-14, renamed alpha-taxilin (TXLNA) was originally described as High molecular weight B-cell growth factor (Ambrus et al. 1994). TXLNA binds several forms of syntaxin (Nogami et al. 2003), but not when they are complexed with SNAP25, VAMP2 or STXBP1, suggesting that TXLNA interacts with syntaxins outside the SNARE complex. This observation and a predicted role in intracellular vesicle trafficking led to renaming of the gene. Txlna transgenic mice show a phenotype similar to systemic lupus erythematosus and Sjogren's syndrome (Shen et al. 2006).

Literature references

Nogami, S., Satoh, S., Nakano, M., Shimizu, H., Fukushima, H., Maruyama, A. et al. (2003). Taxilin; a novel syntaxin-binding protein that is involved in Ca2+-dependent exocytosis in neuroendocrine cells. *Genes Cells, 8*, 17-28. ↗

Editions

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