CYSLTR1 binds CYSLTR1 antagonists

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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. ↗

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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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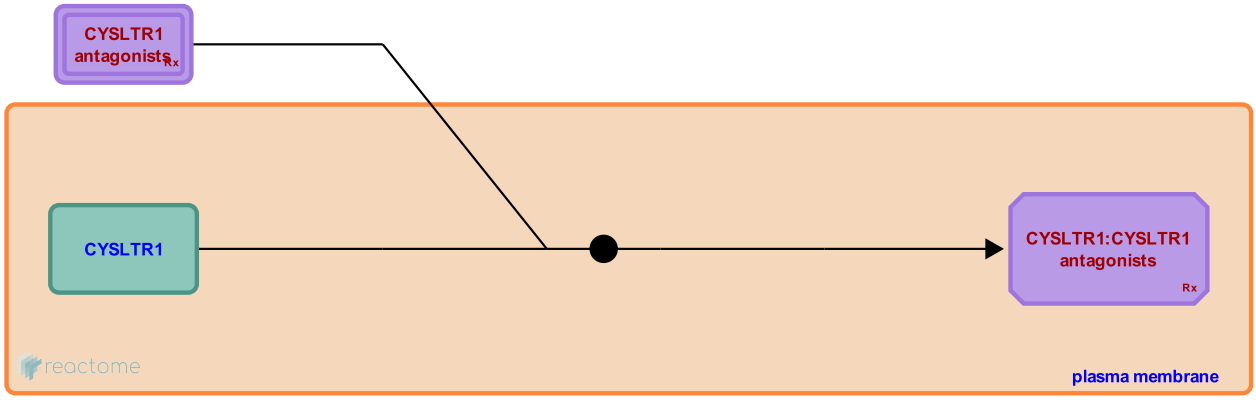
Stable identifier: R-HSA-9684627

Type: binding

Compartments: extracellular region, plasma membrane



Cysteinyl leukotriene receptor 1 (CYSLTR1) is a GPCR through which leukotriene D4 mediates bronchoconstriction. CYSLTR1 antagonists work by antagonising the effects of proinflammatory leukotrienes (such as LTC4, LTD4 and LTE4), resulting in decreased inflammation and decreased hyperresponsiveness of airways to immune challenges (Capra et al. 1998, Snyder & Fleisch 1989, Wendell et al. 2020). The CYSLTR1 antagonists listed here comprise approved (montelukast, pranlukast and zafirlukast) and investigational drugs used in asthma therapy.

Literature references

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Editions

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