CD55 (DAF) promotes C3bBb/C4bC2a dissociation

Bradley, DT., Fraczek, LA., Jupe, S.

European Bioinformatics Institute, New York University Langone Medical Center, Ontario Institute for Cancer Research, Oregon Health and Science University.

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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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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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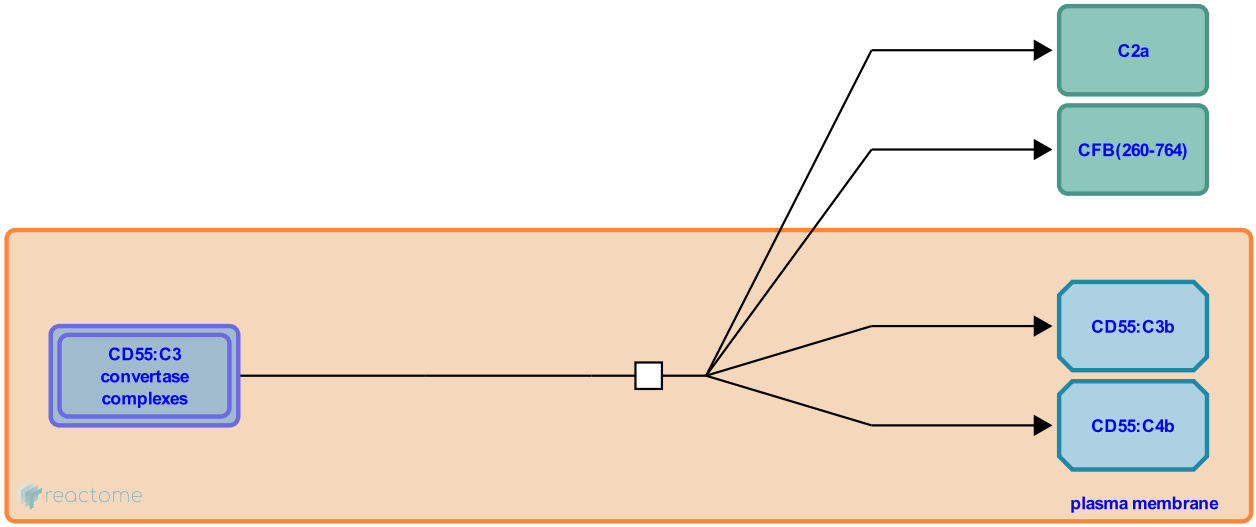
Stable identifier: R-HSA-977619

Type: transition

Compartments: plasma membrane, extracellular region



Decay accelerating factor (DAF, CD55) is a widely distributed membrane protein. It accelerates the dissociation of C3bBb and C4C2a, thereby inhibiting the amplification of complement. DAF can bind C3b and Bb but must bind both for efficient decay acceleration. The regulatory function of DAF is believed to be inhibition of activated C3 convertase enzymes rather than binding of inactive proenzymes (Harris et al. 2007).

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Editions

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