

CD200 binds to CD200R

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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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Reactome database release: 75

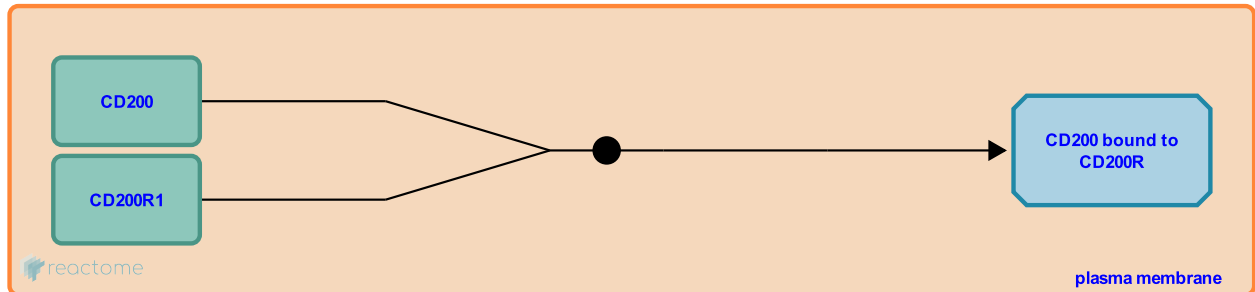
This document contains 1 reaction ([see Table of Contents](#))

CD200 binds to CD200R [↗](#)

Stable identifier: R-HSA-199154

Type: binding

Compartments: plasma membrane



While not ubiquitously distributed, CD200 is expressed on a wide range of cell types including thymocytes, B-cells, activated T-cells, follicular dendritic cells,

endothelium, CNS neurons in the central nervous system, cells in reproductive organs, keratinocytes and renal glomeruli.

CD200R is a myeloid-inhibitory receptor, despite the absence of classical ITIMs in the cytoplasmic portion of the protein.

Interestingly, CD200 is also expressed on neurons within the CNS and would be predicted to modulate activation of microglia through CD200R.

Literature references

Gorczynski, R., Chen, Z., Kai, Y., Lee, L., Wong, S., Marsden, PA. (2004). CD200 is a ligand for all members of the CD200R family of immunoregulatory molecules. *J Immunol*, 172, 7744-9. [↗](#)

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Editions

2007-07-08	Authored	de Bono, B.
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