

# Receptors CCR3, 4 and 5 bind CCL5 ligand

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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: 88

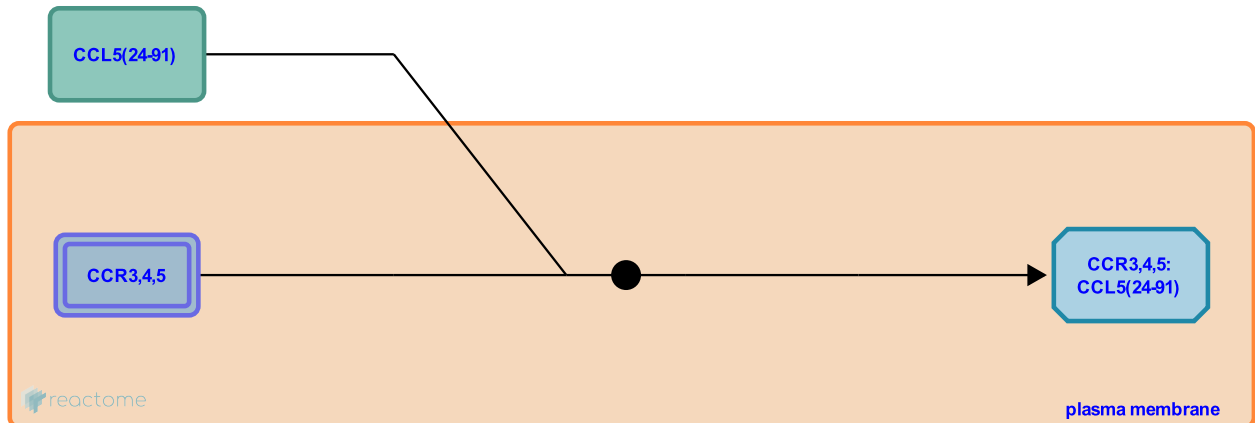
This document contains 1 reaction ([see Table of Contents](#))

## Receptors CCR3, 4 and 5 bind CCL5 ligand [↗](#)

**Stable identifier:** R-HSA-373061

**Type:** binding

**Compartments:** extracellular region, plasma membrane



Three receptors have a common CC chemokine CCL5 that can signal through them. CCR3 (Combadiere C et al, 1995) is highly expressed in eosinophils and basophils and also found in airway epithelial cells, thus implicating this receptor in allergic reactions. CCR4 (Power CA et al, 1995) is expressed in Th2 T lymphocytes and upregulated by T-cell receptor activation. CCR5 (Samson M et al, 1996) mediates the recruitment of cells involved in immune and inflammatory processes.

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### Editions

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