

# Collagen type VIII degradation by MMP1

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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

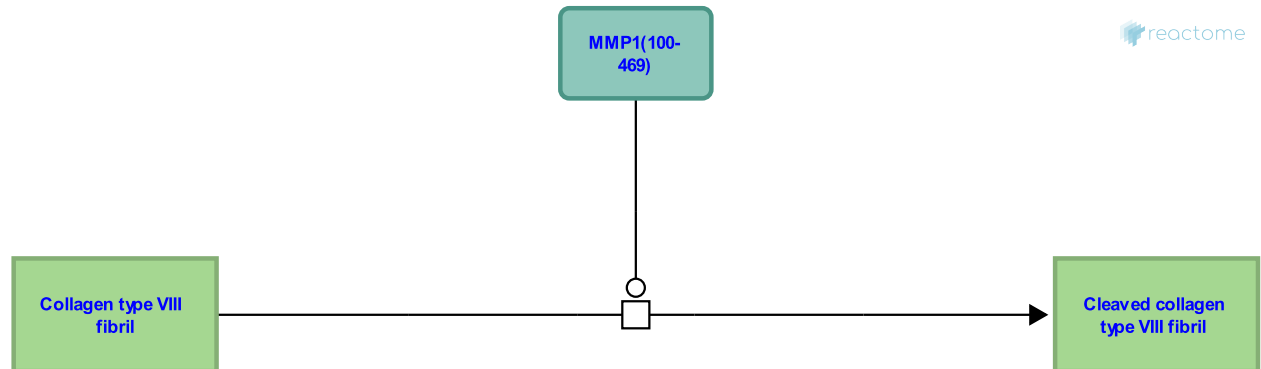
This document contains 1 reaction ([see Table of Contents](#))

## Collagen type VIII degradation by MMP1 [↗](#)

**Stable identifier:** R-HSA-1564169

**Type:** transition

**Compartments:** extracellular region



Collagen type VIII is a short chain, network-forming collagen, thought to play a role in tissue remodeling and repair (Shuttleworth 1997, Weitkamp et al. 1999). There are two alpha chain subtypes, found in a ratio of two alpha-1 to one alpha-2 chains (Mann et al. 1990) in the typical collagen heterotrimer. Studies suggest that type VIII collagen is a major component of the hexagonal lattice seen in Descemet's membrane (Mann et al. 1990). Mutations in both alpha chains have been associated with Fuchs endothelial corneal dystrophy (FECD), a degenerative disease of the corneal endothelium (Jun et al. 2012).

Collagen type VIII can be degraded by MMP1 (Sage et al. 1983, 1984).

### Literature references

Balian, G., Sage, H., Vogel, AM., Bornstein, P. (1984). Type VIII collagen. Synthesis by normal and malignant cells in culture. *Lab Invest*, 50, 219-31. [↗](#)

### Editions

2011-07-12	Authored	Jupe, S.
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