

Exocytosis of tertiary granule lumen proteins

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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

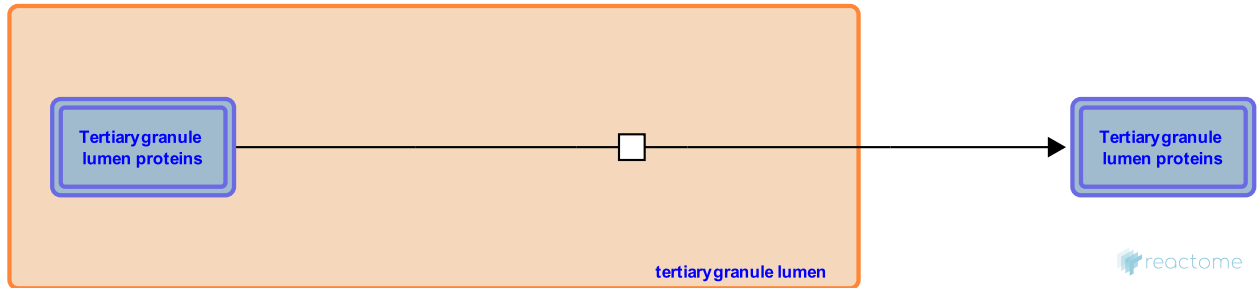
This document contains 1 reaction ([see Table of Contents](#))

Exocytosis of tertiary granule lumen proteins [↗](#)

Stable identifier: R-HSA-6798745

Type: transition

Compartments: tertiary granule lumen, extracellular region



Tertiary (gelatinase) granules are part of a continuum of peroxidase-negative granules formed in myelocytes, metamyelocytes, band cells and segmented neutrophils. They differ from secondary granules by having a low content of antimicrobial substances, and are more readily exocytosed (Sengelov et al. 1995). Tertiary granules are primarily a reservoir of extracellular matrix degrading enzymes and membrane receptors that are needed for neutrophil extravasation and diapedesis (Faurischou & Borregaard 2003).

Literature references

Heegaard, NH., Rørvig, S., Borregaard, N., Østergaard, O. (2013). Proteome profiling of human neutrophil granule subsets, secretory vesicles, and cell membrane: correlation with transcriptome profiling of neutrophil precursors. *J. Leukoc. Biol.*, 94, 711-21. [↗](#)

Editions

2015-09-21	Authored	Jupe, S.
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