

PCSK1 hydrolyzes acyl Proghrelin to acyl Ghrelin

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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

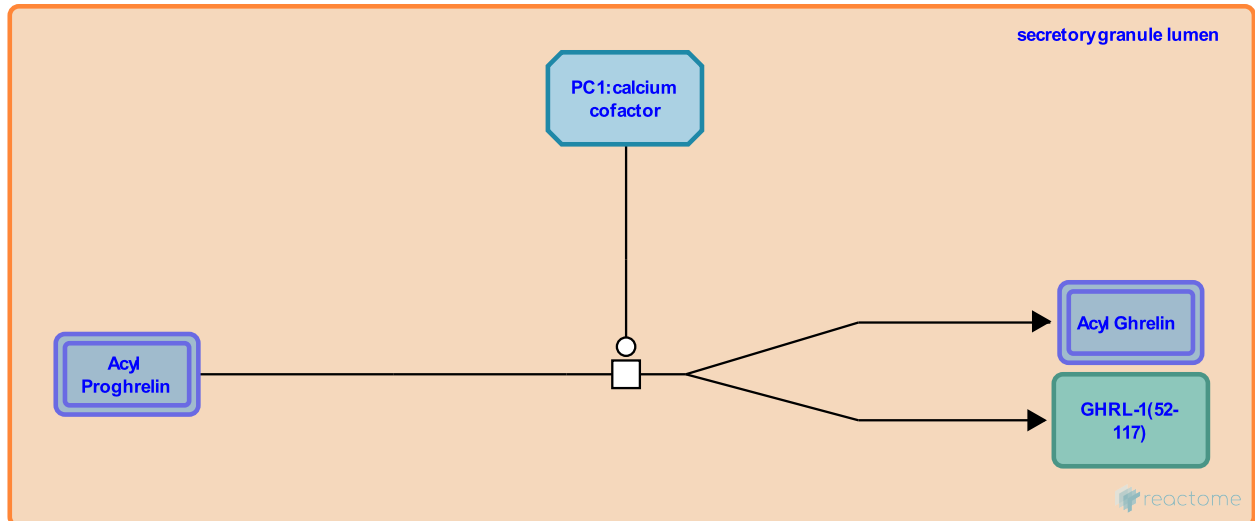
This document contains 1 reaction ([see Table of Contents](#))

PCSK1 hydrolyzes acyl Proghrelin to acyl Ghrelin ↗

Stable identifier: R-HSA-422021

Type: transition

Compartments: secretory granule lumen



Acyl proghrelin is cleaved by prohormone convertase 1/3 (PC1/3) to yield acyl ghrelin (the N-terminal fragment) and C-ghrelin (the C-terminal fragment). Transfection experiments show that PC1/3 is sufficient to generate acyl ghrelin of 28 amino acid residues (acyl ghrelin-28). Acyl ghrelin of 27 amino acid residues (acyl ghrelin-27) can also be detected in plasma. How acyl ghrelin-27 is generated remains undetermined but it is speculated to derive from the cleavage of arginine-28 from the C-terminus of ghrelin by a carboxypeptidase B-like enzyme.

Literature references

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Editions

2009-06-11

Authored, Edited

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