

Acyl Ghrelin and C-Ghrelin are secreted

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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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This document contains 1 reaction (see Table of Contents)

Acyl Ghrelin and C-Ghrelin are secreted **7**

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Compartments: plasma membrane



Acyl ghrelin and C-ghrelin are secreted from secretory granules into the bloodstream. Five forms of acyl ghrelin have been detected: octanoyl ghrelin-28, decanoyl ghrelin-28, octanoyl ghrelin-27, decanoyl ghrelin-27, and decenoyl ghrelin-28. Unacylated ghrelin (des-acyl ghrelin) occurs at higher levels than acyl ghrelin however its function and mechanism of generation are controversial. The function, if any, of C-ghrelin is also unknown. Secretion of ghrelin is stimulated by insulin-like growth factor-1 and muscarinic agonists; Secretion is inhibited by

insulin, somatotropin, leptin, glucose, glucagon, and fatty acids. Carbohydrates have more inhibitory effect than fat does. The mechanisms by which the regulation is effected are unknown.

Fatty acids inhibit the secretion of ghrelin by an unknown mechanism. Fatty acids have less effect than carbohydrates do.

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Editions

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