

Somatostatin receptors bind somatostatin

and cortistatin

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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)

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Stable identifier: R-HSA-374758

Type: binding

Compartments: extracellular region, plasma membrane



Somatostatin (growth hormone inhibiting hormone, GHIH; somatotropin release-inhibiting factor, SRIF) (Shen LP et al, 1992) is a peptide hormone that regulates the endocrine system and affects neurotransmission and cell proliferation via interaction with somatostatin receptors 1-5 (Hoyer D et al, 1995). Somatostatin has two active forms produced by alternative cleavage of the single preproprotein and named according to the number of amino acids in the chain; Somatostatin-28 and somatostatin-14. The 5 receptors known to date all couple with pertussis toxinsensitive G proteins to inhibit adenylate cyclase after ligand binding. They were classified according to the dates they were discovered; SSTR1 and 2 (Yamada Y et al, Jan. 1992), SSTR3 (Yamada Y et al, Dec. 1992) and SSTR4 and SSTR5 (Yamada Y et al, Sep. 1993).

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Editions

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