

SLC40A1:CP:6Cu²⁺ oxidises Fe²⁺ to Fe³⁺

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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: 74

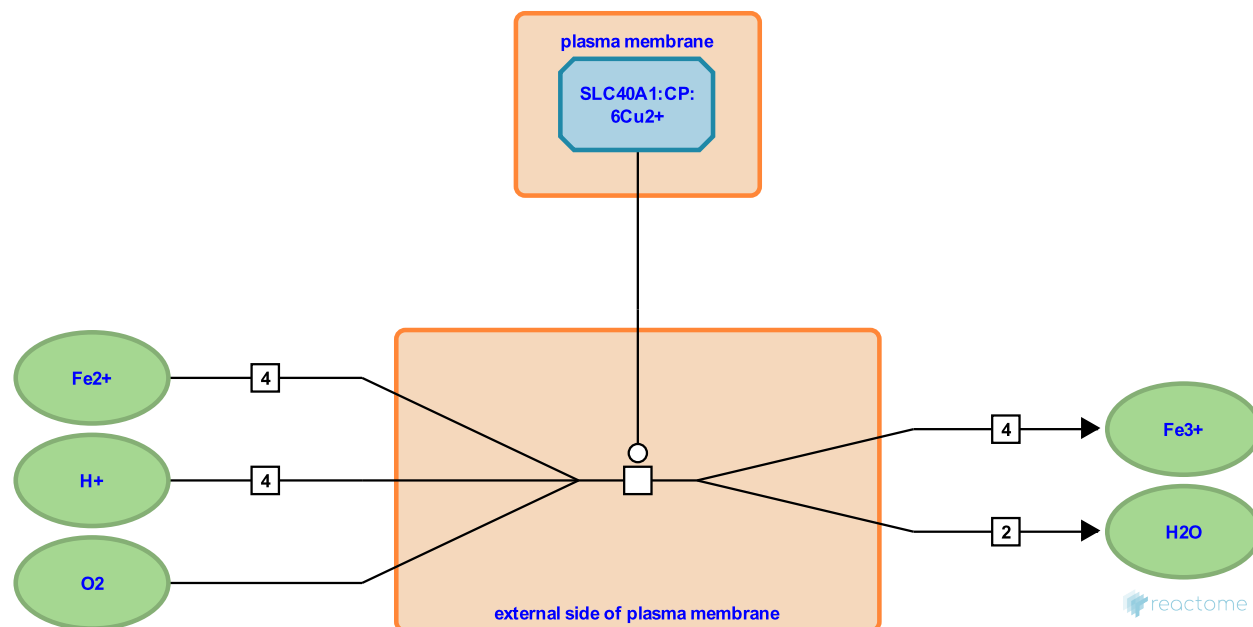
This document contains 1 reaction ([see Table of Contents](#))

SLC40A1:CP:6Cu²⁺ oxidises Fe²⁺ to Fe³⁺ ↗

Stable identifier: R-HSA-917891

Type: transition

Compartments: external side of plasma membrane



In tissues other than the duodenum, ceruloplasmin (CP), in complex with SLC40A1 and 6 copper ions, oxidises ferrous iron (Fe²⁺) to ferric iron (Fe³⁺) after it is exported from the cell (Sato et al. 1990).

Literature references

Sato, M., Schilsky, ML., Stockert, RJ., Morell, AG., Sternlieb, I. (1990). Detection of multiple forms of human ceruloplasmin. A novel Mr 200,000 form. *J Biol Chem*, 265, 2533-7. ↗

Editions

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