SERPINB13 gene expression is inhibited by RUNX1:CBFB

Chuang, L.S., Ito, Y., Orlic-Milacic, M.
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


Reactome database release: 73

This document contains 1 reaction (see Table of Contents)

https://reactome.org
SERPINB13 gene expression is inhibited by RUNX1:CBFB

Stable identifier: R-HSA-8938063

Type: omitted

Compartments: nucleoplasm, lysosomal lumen

Binding of the RUNX1:CBFB complex to the promoter of the SERPINB13 gene inhibits SERPINB13 transcription and results in higher cathepsin K activity in cells, as SERPINB13 is an inhibitor of cathepsin K and L. Cathepsin K and L are associated with proliferation and invasiveness of cancer cells (Nomura and Katunuma 2005). SERPINB13 is frequently downregulated in head and neck cancers (Boyapati et al. 2011).

Literature references


Editions

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