

# ELAC2 cleaves the 3' end of pre-tRNA

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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

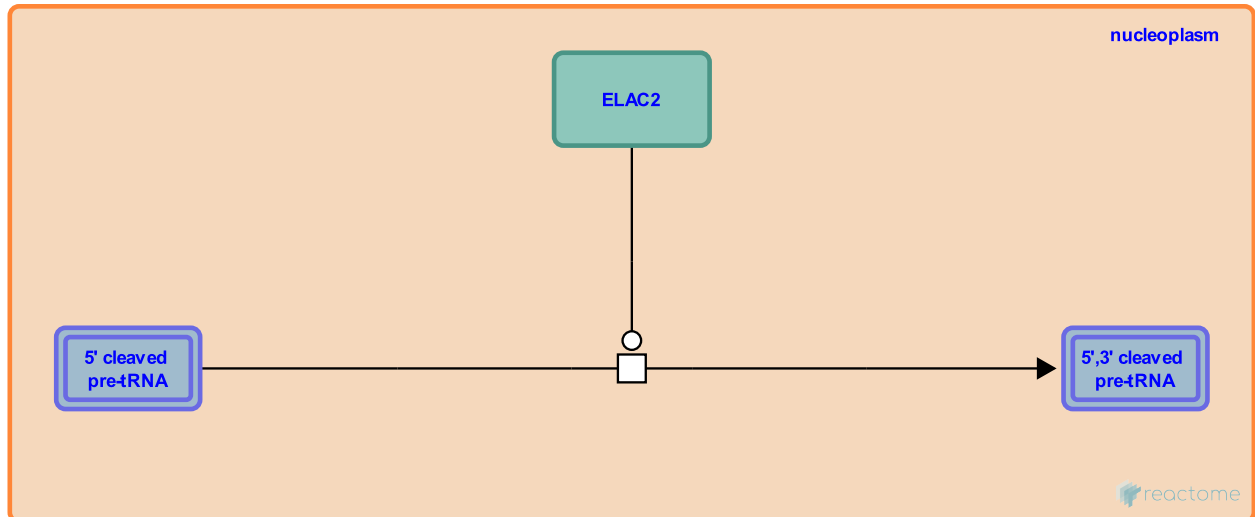
This document contains 1 reaction ([see Table of Contents](#))

## ELAC2 cleaves the 3' end of pre-tRNA [↗](#)

**Stable identifier:** R-HSA-5696815

**Type:** transition

**Compartments:** nucleoplasm



ELAC2, a RNaseZ activity in humans, endonucleolytically cleaves pre-tRNAs near the 3' end, generating a 3' hydroxyl group to which the nucleotides CCA will be polymerized (Takaku et al. 2004, Yan et al. 2006, Elbarbary et al. 2008). ELAC2 is located in both the nucleus and mitochondria (Brzezniak et al. 2011). ELAC1, a homologue of ELAC2, is located in the cytosol (Rossmanith 2011) and cleaves 3' ends of tRNAs in vitro (Takaku et al. 2003).

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### Editions

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