

TUFM hydrolyzes GTP and TUFM:GDP dissociates from 55S ribosome

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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](#))

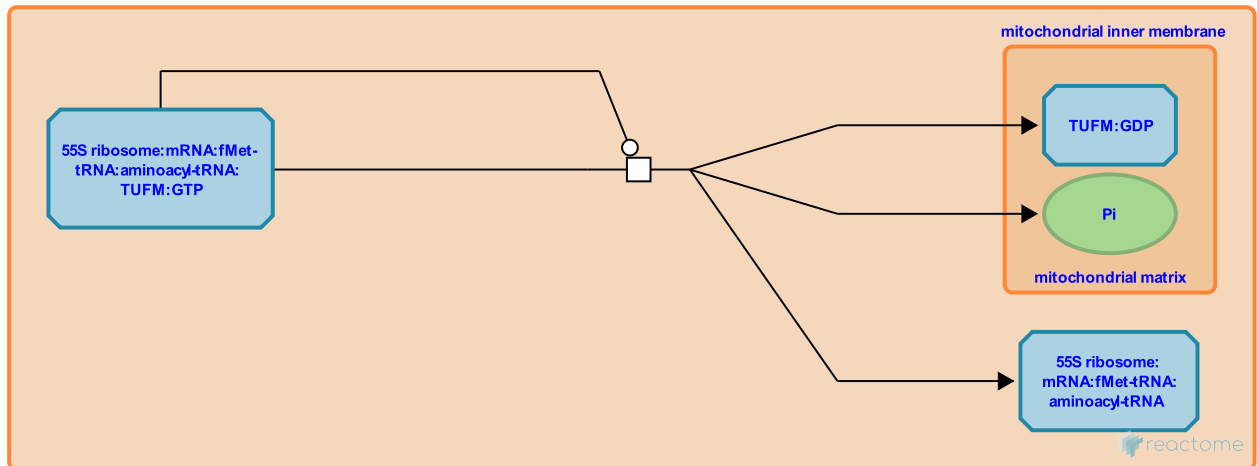
TUFM hydrolyzes GTP and TUFM:GDP dissociates from 55S ribosome ↗

Stable identifier: R-HSA-5389842

Type: transition

Compartments: mitochondrial matrix, mitochondrial inner membrane

Inferred from: [TUFM:GDP dissociates from 55S ribosome \(Bos taurus\)](#)



As inferred from bovine homologs, interaction of the cognate aminoacyl-tRNA in the A-site with the codon in the mRNA causes TUFM (EF-Tu) to hydrolyze GTP. TUFM:GDP then dissociates from the ribosome.

Editions

2014-04-26	Authored, Edited	May, B.
2014-08-29	Reviewed	Chrzanowska-Lightowlers, ZM.
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