

Sec-tRNA(Sec):EEFSEC:GTP binds to 80S

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.

The development of Reactome is supported by grants from the US National Institutes of Health (P41 HG003751), University of Toronto (CFREF Medicine by Design), European Union (EU STRP, EMI-CD), and the European Molecular Biology Laboratory (EBI Industry program).

Literature references

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- Fabregat, A., Korninger, F., Viteri, G., Sidiropoulos, K., Marin-Garcia, P., Ping, P. et al. (2018). Reactome graph database: Efficient access to complex pathway data. *PLoS computational biology*, 14, e1005968. [↗](#)

Reactome database release: 76

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

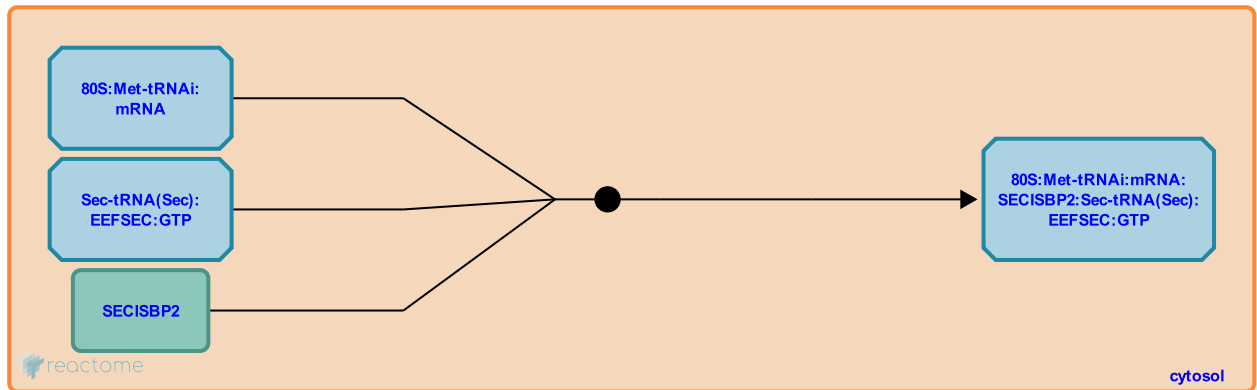
Sec-tRNA(Sec):EEFSEC:GTP binds to 80S Ribosome ↗

Stable identifier: R-HSA-2408529

Type: binding

Compartments: cytosol

Inferred from: [Sec-tRNA\(Sec\):Eefsec:GTP binds to Rpl30 \(Rattus norvegicus\)](#)



The complex consisting of selenocysteinyl (Sec) transfer RNA (tRNA) for Sec (Sec-tRNA^{Sec}), selenocysteine-specific elongation factor (EEFSEC) aka SelB, selenocysteine insertion sequence-binding protein 2 (SECISBP2) aka SBP2 and GTP interacts with the 80S ribosomal protein complex (80S:Met-tRNAⁱ:mRNA). This reaction is inferred from events occurring in rats.

Literature references

Chavatte, L., Brown, BA., Driscoll, DM. (2005). Ribosomal protein L30 is a component of the UGA-selenocysteine recoding machinery in eukaryotes. *Nat. Struct. Mol. Biol.*, 12, 408-16. ↗

Editions

2014-05-06	Authored	Williams, MG.
2015-08-29	Edited	D'Eustachio, P.
2015-08-30	Reviewed	Rush, MG.