

EEFSEC Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9077b**Specification**

EEFSEC Antibody (C-term) - Product Information

Application	WB, IHC-P,E
Primary Accession	P57772
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	65305
Antigen Region	541-568

EEFSEC Antibody (C-term) - Additional Information**Gene ID** 60678**Other Names**

Selenocysteine-specific elongation factor, Elongation factor sec, Eukaryotic elongation factor, selenocysteine-tRNA-specific, EEFSEC, SELB

Target/Specificity

This EEFSEC antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 541-568 amino acids from the C-terminal region of human EEFSEC.

Dilution

WB~~1:1000
IHC-P~~1:50~100

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

EEFSEC Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

EEFSEC Antibody (C-term) - Protein Information**Name** EEFSEC {ECO:0000303|PubMed:27708257, ECO:0000312|HGNC:HGNC:24614}**Function** Translation factor required for the incorporation of the rare amino acid selenocysteine

encoded by UGA codons (PubMed:[27708257](#), PubMed:[35709277](#)). Replaces the eRF1-eRF3-GTP ternary complex for the insertion of selenocysteine directed by the UGA codon (PubMed:[27708257](#), PubMed:[35709277](#)). Insertion of selenocysteine at UGA codons is mediated by SECISBP2 and EEFSEC: SECISBP2 (1) specifically binds the SECIS sequence once the 80S ribosome encounters an in-frame UGA codon and (2) contacts the RPS27A/eS31 of the 40S ribosome before ribosome stalling (PubMed:[35709277](#)). (3) GTP-bound EEFSEC then delivers selenocysteinyl-tRNA(Sec) to the 80S ribosome and adopts a preaccommodated state conformation (PubMed:[35709277](#)). (4) After GTP hydrolysis, EEFSEC dissociates from the assembly, selenocysteinyl-tRNA(Sec) accommodates, and peptide bond synthesis and selenoprotein elongation occur (PubMed:[35709277](#)).

Cellular Location

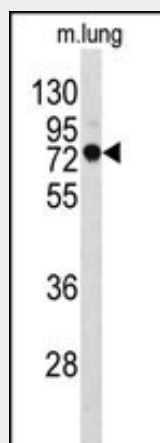
Cytoplasm. Nucleus.

EEFSEC Antibody (C-term) - Protocols

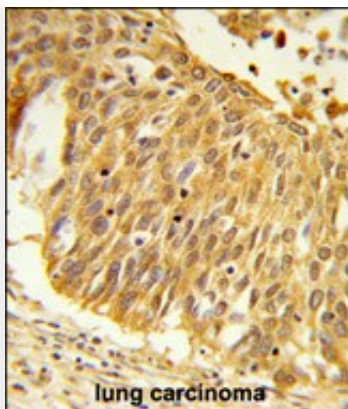
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

EEFSEC Antibody (C-term) - Images



Western blot analysis of EEFSEC Antibody (C-term) (Cat. #AP9077b) in mouse lung tissue lysates (35ug/lane). EEFSEC (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human lung carcinoma reacted with EEFSEC Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

EEFSEC Antibody (C-term) - Background

EEFSEC is a translation factor necessary for the incorporation of selenocysteine into proteins. It probably replaces EF-Tu for the insertion of selenocysteine directed by the UGA codon. SelB binds GTP and GDP.