

**EF-1  $\alpha$ 1/2 (Acetyl Lys41) Polyclonal Antibody**  
Catalog # AP63225**Specification****EF-1  $\alpha$ 1/2 (Acetyl Lys41) Polyclonal Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P68104</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

**EF-1  $\alpha$ 1/2 (Acetyl Lys41) Polyclonal Antibody - Additional Information**

Gene ID 1915

**Other Names**

EEF1A1; EEF1A; EF1A; LENG7; Elongation factor 1-alpha 1; EF-1-alpha-1; Elongation factor Tu; EF-Tu; Eukaryotic elongation factor 1 A-1; eEF1A-1; Leukocyte receptor cluster member 7; EEF1A2; EEF1AL; STN; Elongation factor 1-alpha 2; EF-1-alpha-2; Eukaryotic elongation factor 1 A-2; eEF1A-2; Statin-S1; EEF1A1P5; EEF1AL3; Putative elongation factor 1-alpha-like 3; EF-1-alpha-like 3; Eukaryotic elongation factor 1 A-like 3; eEF1A-like 3; Eukaryotic translation elongation factor 1 alpha-1 pseudogene 5

**Dilution**

WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications.

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**EF-1  $\alpha$ 1/2 (Acetyl Lys41) Polyclonal Antibody - Protein Information**

Name EEF1A1

Synonyms EEF1A, EF1A, LENG7

**Function**

Translation elongation factor that catalyzes the GTP- dependent binding of aminoacyl-tRNA (aa-tRNA) to the A-site of ribosomes during the elongation phase of protein synthesis (PubMed:<a href="http://www.uniprot.org/citations/26593721" target="\_blank">26593721</a>, PubMed:<a href="http://www.uniprot.org/citations/26651998" target="\_blank">26651998</a>, PubMed:<a href="http://www.uniprot.org/citations/36123449" target="\_blank">36123449</a>, PubMed:<a href="http://www.uniprot.org/citations/36264623" target="\_blank">36264623</a>, PubMed:<a href="http://www.uniprot.org/citations/36638793" target="\_blank">36638793</a>). Base pairing between the mRNA codon and the aa-tRNA anticodon promotes GTP hydrolysis, releasing the aa-tRNA from EEF1A1 and allowing its accommodation into the ribosome (PubMed:<a

<http://www.uniprot.org/citations/26593721> target="\_blank">26593721</a>, PubMed:<a href="http://www.uniprot.org/citations/26651998" target="\_blank">26651998</a>, PubMed:<a href="http://www.uniprot.org/citations/36123449" target="\_blank">36123449</a>, PubMed:<a href="http://www.uniprot.org/citations/36264623" target="\_blank">36264623</a>, PubMed:<a href="http://www.uniprot.org/citations/36638793" target="\_blank">36638793</a>). The growing protein chain is subsequently transferred from the P-site peptidyl tRNA to the A-site aa-tRNA, extending it by one amino acid through ribosome-catalyzed peptide bond formation (PubMed:<a href="http://www.uniprot.org/citations/26593721" target="\_blank">26593721</a>, PubMed:<a href="http://www.uniprot.org/citations/26651998" target="\_blank">26651998</a>, PubMed:<a href="http://www.uniprot.org/citations/36123449" target="\_blank">36123449</a>, PubMed:<a href="http://www.uniprot.org/citations/36264623" target="\_blank">36264623</a>). Also plays a role in the positive regulation of IFNG transcription in T-helper 1 cells as part of an IFNG promoter-binding complex with TXK and PARP1 (PubMed:<a href="http://www.uniprot.org/citations/17177976" target="\_blank">17177976</a>).

### Cellular Location

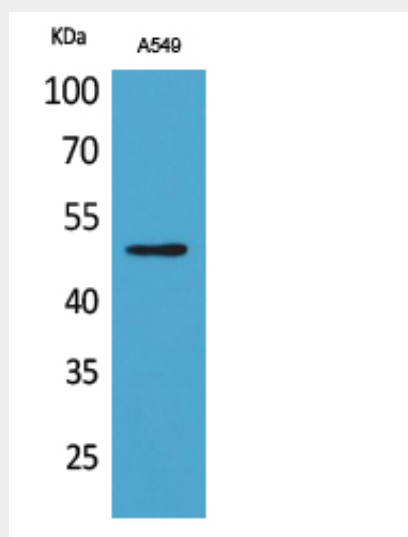
Cytoplasm. Nucleus. Nucleus, nucleolus. Cell membrane. Note=Colocalizes with DLC1 at actin-rich regions in the cell periphery (PubMed:19158340). Translocates together with ZPR1 from the cytoplasm to the nucleus and nucleolus after treatment with mitogens (PubMed:8650580). Localization at the cell membrane depends on EEF1A1 phosphorylation status and the presence of PPP1R16B (PubMed:26497934).

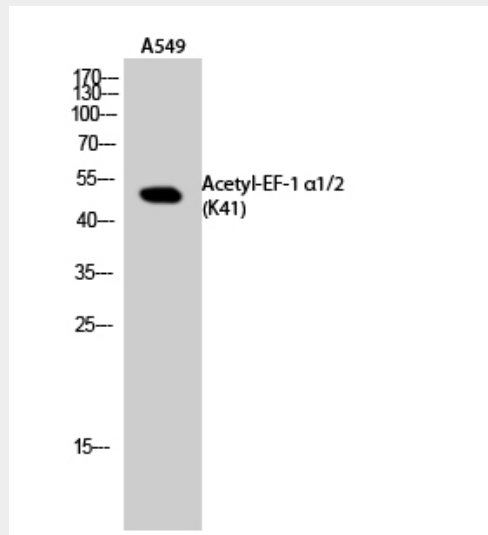
### EF-1 $\alpha$ 1/2 (Acetyl Lys41) Polyclonal Antibody - Protocols

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](#)

### EF-1 $\alpha$ 1/2 (Acetyl Lys41) Polyclonal Antibody - Images





### EF-1 $\alpha$ 1/2 (Acetyl Lys41) Polyclonal Antibody - Background

This protein promotes the GTP-dependent binding of aminoacyl-tRNA to the A-site of ribosomes during protein biosynthesis. With PARP1 and TXK, forms a complex that acts as a T helper 1 (Th1) cell-specific transcription factor and binds the promoter of IFN-gamma to directly regulate its transcription, and is thus involved importantly in Th1 cytokine production.