

**eEF1A1 Antibody**  
**Rabbit mAb**  
**Catalog # AP92033**

## Specification

## eEF1A1 Antibody - Product Information

|                                                                                 |                        |
|---------------------------------------------------------------------------------|------------------------|
| Application                                                                     | WB, IHC, FC, ICC, IP   |
| Primary Accession                                                               | <a href="#">P68104</a> |
| Reactivity                                                                      | Rat                    |
| Clonality                                                                       | Monoclonal             |
| <b>Other Names</b>                                                              |                        |
| EEF1A1; CCS-3; CCS3; EEF-1; EEF1A; EF-Tu; EF1A; GRAF-1EF; LENG7; PTI1; eEF1A-1; |                        |
| Isotype                                                                         | Rabbit IgG             |
| Host                                                                            | Rabbit                 |
| Calculated MW                                                                   | 50141 Da               |

## eEF1A1 Antibody - Additional Information

|                              |                                                                                                                                                                                          |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dilution                     | <b>WB~~1:1000</b><br><b>IHC~~1:100~500</b><br><b>FC~~1:10~50</b><br><b>ICC~~N/A</b><br><b>IP~~N/A</b>                                                                                    |
| Purification                 | <b>Affinity-chromatography</b>                                                                                                                                                           |
| Immunogen                    | <b>A synthesized peptide derived from human eEF1A1</b>                                                                                                                                   |
| Description                  | <b>This protein promotes the GTP-dependent binding of aminoacyl-tRNA to the A-site of ribosomes during protein biosynthesis.</b>                                                         |
| Storage Condition and Buffer | <b>Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.</b> |

## eEF1A1 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 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>). 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

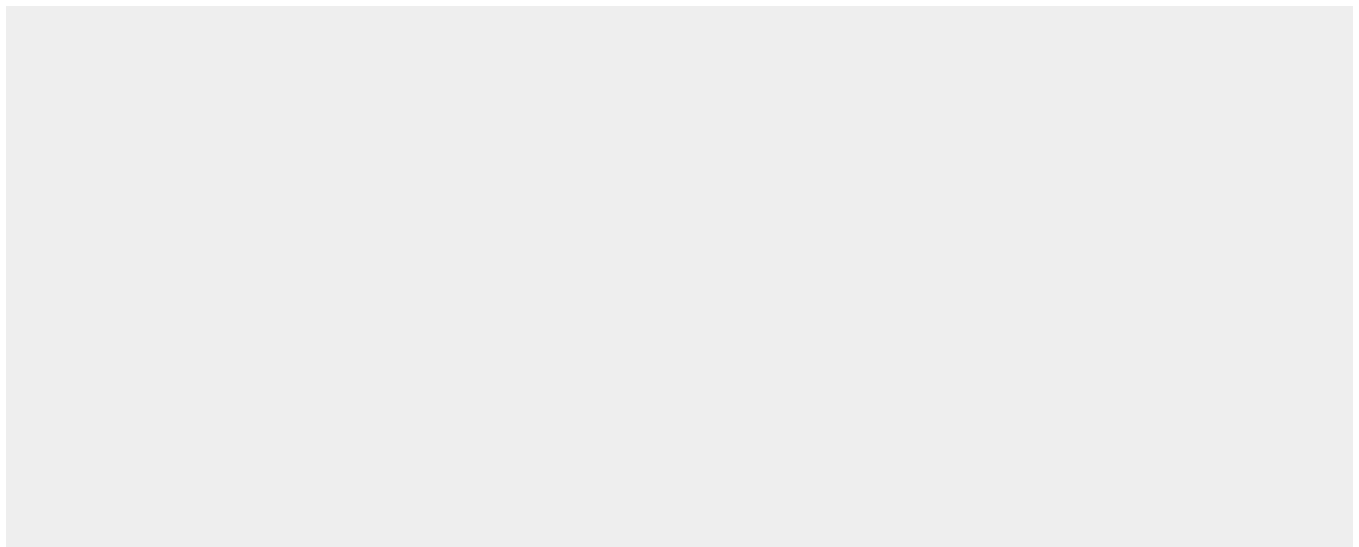
Cytoplasm. Nucleus. Nucleus, nucleolus. Cell membrane. Note=Colocalizes with DLC1 at actin-rich regions in the cell periphery (PubMed:19158340). Translocates together with ZPR1 from the cytoplasm to the nucleus and nucleolus after treatment with mitogens (PubMed:8650580). Localization at the cell membrane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

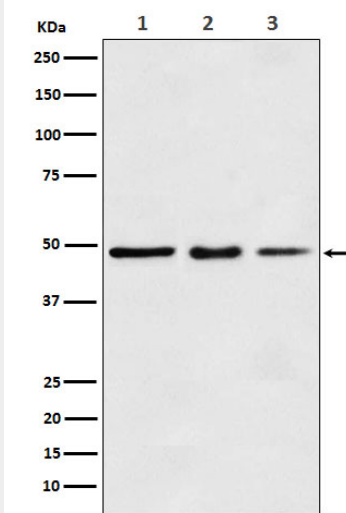
### eEF1A1 Antibody - Protocols

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](#)

### eEF1A1 Antibody - Images





Western blot analysis of eEF1A1 expression in (1) MCF7 cell lysate; (2) Mouse kidney lysate; (2) Rat spleen lysate.