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# EF-1 α1/2 Polyclonal Antibody

Catalog # AP73677

## Product Information

| | |
|---|---|
| **Application** | WB, E |
| **Primary Accession** | P68104, Q05639, Q5VTE0 |
| **Reactivity** | Human, Mouse, Rat |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 50141 |

## Additional Information

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|---|---|
| **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. E~~N/A |
| **Format** | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide. |
| **Storage Conditions** | -20℃ |

## Protein Information

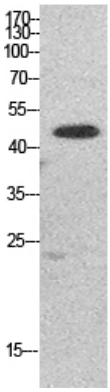
| | |
|---|---|
| **Name** | EEF1A1 |
| **Synonyms** | EEF1A, EF1A, LENG7 |
| **Function** | Translation elongation factor that catalyzes the GTP- dependent binding of aminoacyl-tRNA (aa-tRNA) to the A-site of ribosomes during the elongation phase of protein synthesis (PubMed:26593721, PubMed:26651998, PubMed:36123449, PubMed:36264623, PubMed:36638793). 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:26593721, PubMed:26651998, PubMed:36123449, PubMed:36264623, PubMed:36638793). 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:26593721, PubMed:26651998, PubMed:36123449, PubMed:36264623). 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:17177976). Also plays a role in cytoskeleton organization by promoting actin bundling (By similarity).

**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).

## Images




Western Blot analysis of HepG2 cells using EF-1 α1/2 Polyclonal Antibody.. Secondary antibody was diluted at 1:20000

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.