

# Elongation Factor 1A1 Rabbit mAb

Catalog # AP75377

### **Product Information**

ApplicationWB, IHC-P, IPPrimary AccessionP68104

**Reactivity** Human, Mouse, Rat

**Host** Rabbit

**Clonality** Monoclonal Antibody

Calculated MW 50141

## **Additional Information**

**Gene ID** 1915

Other Names EEF1A1

**Dilution** WB~~1/500-1/1000 IHC-P~~N/A IP~~N/A

Format Liquid

#### **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:<u>26593721</u>, PubMed:<u>26651998</u>, PubMed:<u>36123449</u>, PubMed:<u>36264623</u>, PubMed:<u>36638793</u>). 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:<u>26593721</u>, PubMed:<u>26651998</u>,

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

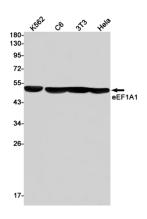
similarity).

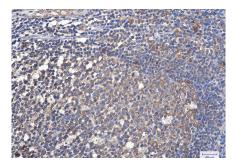
**Cellular Location** Cytoplasm. Nucleus. Nucleus, nucleolus. Cell membrane. Note=Colocalizes

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**





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