

# Elongation Factor 1A1 Rabbit mAb

Catalog # AP76475

## **Product Information**

Application	WB, IHC-P, IHC-F, ICC
Primary Accession	<u>P68104</u>
Reactivity	Human, 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 IHC-F~~N/A ICC~~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: <u>26593721</u> , PubMed: <u>26651998</u> , PubMed: <u>36123449</u> , PubMed: <u>36264623</u> , PubMed: <u>36638793</u> ). 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: <u>36123449</u> , PubMed: <u>36264623</u> ). 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: <u>17177976</u> ). 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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