10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-EEF1A1 Antibody

Rabbit Anti Human Polyclonal Antibody
Catalog # ALS18574

Product Information

Application	WB, IHC-P, IF
Primary Accession	P68104
Predicted	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	50141

Additional Information

Gene ID	1915
Alias Symbol	EEF1A1
Other Names	EEF1A1, Cervical cancer suppressor 3, CCS-3, CCS3, EEF-1, Elongation factor Tu, EEF1A, EF-Tu, EF1A, Elongation factor 1-alpha 1, GRAF-1EF, LENG7, PTI1, CTCL tumor antigen, EE1A1, EEF1A-1, EF-1-alpha-1, EF1a-like protein, HNGC:16303
Target/Specificity	Human EEF1A1 / EEF1A
Reconstitution & Storage	Affinity purified
Precautions	Anti-EEF1A1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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).