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eEF1A1 Antibody

Rabbit mAb
Catalog # AP92033

Product Information

Application	WB, IHC, IF, FC, ICC, IP, IHF
Primary Accession	P68104
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	EEF1A1; CCS-3; CCS3; EEF-1; EEF1A; EF-Tu; EF1A; GRAF-1EF; LENG7; PTI1;eEF1A-1;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	50141

Additional Information

Dilution	WB 1000~1:5000 IHC 1:50~1:200 ICC/IF 1:50~1:200 IP 1:50 FC 1:50
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human eEF1A1
Description	This protein promotes the GTP-dependent binding of aminoacyl-tRNA to the A-site of ribosomes during protein biosynthesis.
Storage Condition and Buffer	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.

Protein Information

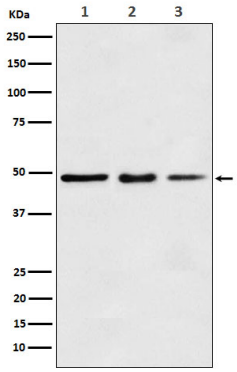
Name	EEF1A1
Synonyms	EEF1A, EF1A, LENG7
Function	Translation elongation factor that catalyzes the GTP- dependent binding of aminoacyl-tRNA (aa-tRNA) to the A-site of ribosomes during the elongation phase of protein synthesis (PubMed:26593721, PubMed:26651998, PubMed:36123449, PubMed:36264623, PubMed:36638793). 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 eEF1A1 expression in (1) MCF7 cell lysate; (2) Mouse kidney lysate; (2) Rat spleen lysate.

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