

Rabbit EEF1A1 Polyclonal Antibody | anti-EEF1A1 antibody

EEF1A1 Antibody

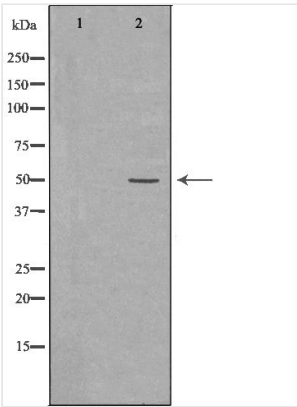
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA325938	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

EEF1A1; Polyclonal Antibody; EEF1A1 Antibody; CCS 3; CCS3; Cervical cancer suppressor 3; chunp6927; CTCL tumor antigen; EE1A1; EEF 1; EEF1A; eEF1A-1; EF-1-alpha-1; EF-Tu; EF1A; EF1a like protein; EF1A1_HUMAN; Elongation factor 1 alpha subunit; Elongation factor 1-alpha 1; Elongation factor Tu; Eukaryotic elongation factor 1 A-1; Eukaryotic translation elongation factor 1 alpha 1; Eukaryotic translation elongation factor 1 alpha 1 like 14; Glucocorticoid receptor AF 1 specific elongation factor; GRAF 1EF; HNGC:16303; ik:tdsubc_2a3; ik:tdsubc_2b3; LENG7; Leukocyte receptor cluster (LRC) member 7; Leukocyte receptor cluster member 7; Prostate tumor inducing protein 1; PTI1; tdsbuc_2a3; Translation elongation factor 1 alpha 1 like 14; wu:fa91c07; wu:fa94b03; wu:fi13b09; xx:tdsubc_2a3; xx:tdsubc_2b3; anti-EEF1A1 antibody

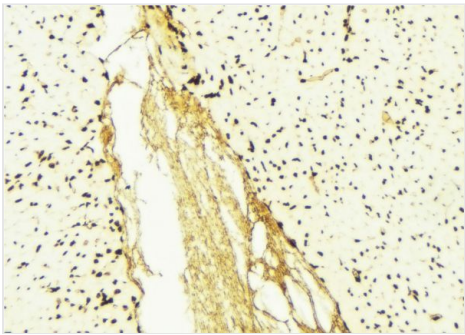
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	EEF1A1 antibody detects endogenous levels of total EEF1A1
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	462
Applicable Applications for anti-EEF1A1 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human EEF1A1
Subcellular Location	Cytoplasm.
Tissue Specificity	Brain, placenta, lung, liver, kidney, pancreas but barely detectable in heart and skeletal muscle.
Predicted Cross Reactivity	Pig, Bovine, Horse, Sheep, Rabbit, Dog, Xenopus
Similarity	Pig (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Xenopus (100%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



WB (Western Blot)

Western blot analysis of HeLa whole cell lysates, using EE1A1 Antibody. The lane on the left is treated with the antigen-specific peptide.



IHC (Immunohistochemistry)

AAA325938 at 1/100 staining Mouse liver tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL INFORMATION

Related Product Information for anti-EEF1A1 antibody

Description: Translation is the process where amino acid residues are assembled into polypeptides on ribosomes. This process is generally divided into three stages: initiation, elongation and termination. During elongation, mRNA and tRNA pair at the two active sites (A and P sites) on the ribosome. A number of eukaryotic elongation factors (eEFs) are involved in this process in mammalian cells (1). eEF1A, also called elongation factor Tu (EF-Tu), binds GTP and interacts with amino acyl-tRNAs to promote recruitment of amino acyl-tRNAs to the A-site of the ribosome (1). After GTP hydrolysis, GDP-eEF1A leaves the ribosome and is later converted back to the GTP-eEF1A by eEF1B (1). Studies have shown that eEF1A is phosphorylated under certain conditions, indicating that its activity is regulated at the post-translational level (2, 3).

Function: This protein promotes the GTP-dependent binding of aminoacyl-tRNA to the A-site of ribosomes during protein biosynthesis. With PARP1 and TXK, forms a complex that acts as a T helper 1 (Th1) cell-specific transcription factor and binds the promoter of IFN-gamma to directly regulate its transcription, and is thus involved importantly in Th1 cytokine production.

Subunit Structure: Found in a nuclear export complex with XPO5, EEF1A1, Ran and aminoacylated tRNA. Interacts with PARP1, TXK, XPO5 and KARS. May interact with ERGIC2. Interacts with IFIT1 (via TPR repeats 4-7) (By similarity). Interacts with DLC1, facilitating distribution to the membrane periphery and ruffles upon growth factor stimulation. Interacts with ZPR1; the interaction occurs in a epidermal growth factor (EGF)-dependent manner. Interacts with PPP1R16B (PubMed:26497934).

Post-translational Modifications: ISGylated. Phosphorylated by TXK. Phosphorylation by PASK increases translation efficiency. Phosphorylated by ROCK2 (PubMed:26497934). Trimethylated at Lys-79 by EEF1AKMT1 (PubMed:26545399). Methylated at Lys-165 by EEF1AKMT3, methylation by EEF1AKMT3 is dynamic as well as inducible by stress conditions, such as ER-stress, and plays a regulatory role on mRNA translation (PubMed:28108655). Trimethylated at Lys-318 by EEF1AKMT2 (PubMed:25144183). Mono-, di-, and trimethylated at Lys-36 by EEF1AKMT4; trimethylated form is predominant. Methylation by EEF1AKMT4 contributes to the fine-tuning of translation rates for a subset of tRNAs (PubMed:28520920).

Similarity: Belongs to the TRAFAC class translation factor GTPase superfamily. Classic translation factor GTPase family. EF-Tu/EF-1A subfamily.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4503471
NCBI GeneID	1915
NCBI Accession #	NP_001393.1
NCBI GenBank Nucleotide #	NM_001402.5
UniProt Accession #	P68104; P04719; P04720; Q6IQ15
Molecular Weight	Observed: 50 kDa Predicted: 51 kDa

NCBI Official Full Name	elongation factor 1-alpha 1
NCBI Official Synonym Full Names	eukaryotic translation elongation factor 1 alpha 1
NCBI Official Symbol	EEF1A1
NCBI Official Synonym Symbols	CCS3; EF1A; PTI1; CCS-3; EE1A1; EEF-1; EEF1A; EF-Tu; LENG7; eEF1A-1; GRAF-1EF; HNGC:16303
NCBI Protein Information	elongation factor 1-alpha 1
UniProt Protein Name	Elongation factor 1-alpha 1
UniProt Gene Name	EEF1A1
UniProt Synonym Gene Names	EEF1A; EF1A; LENG7; EF-1-alpha-1; EF-Tu; eEF1A-1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/eef1a1-antibody-immunohistochemistry-western-blot-elisa/325938>