

Rabbit EEF2K Polyclonal Antibody | anti-EEF2K antibody

EEF2K Antibody

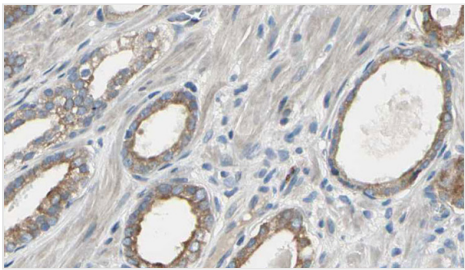
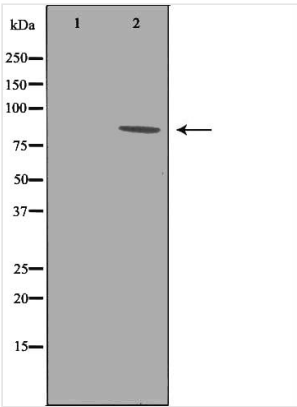
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA327024	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

EEF2K; Polyclonal Antibody; EEF2K Antibody; C86191; Calcium/calmodulin dependent eukaryotic elongation factor 2; Calcium/calmodulin dependent eukaryotic elongation factor 2 kinase; Calcium/calmodulin-dependent eukaryotic elongation factor 2 kinase; Calmodulin dependent protein kinase III; cb365; EC 2.7.11.20; eEF 2 kinase; eEF 2K; eEF-2 kinase; eEF-2K; Eef2k; EEF2K protein; EF2K_HUMAN; Elongation factor 2 kinase; Eukaryotic elongation factor 2 kinase; fa04b08; HSU93850; kinase eEF2K; MGC45041; SMEF2K; wu:fa04b08; zgc:100973; anti-EEF2K antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	EEF2K antibody detects endogenous levels of total EEF2K
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	725
Applicable Applications for anti-EEF2K antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human EEF2K
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



IHC (Immunohiostchemistry)
AAA327024 at 1/100 staining Human prostate 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.

WB (Western Blot)
Western blot analysis of HeLa whole cell lysates, using EE2K Antibody. The lane on the left is treated with the antigen-specific peptide.



IF (Immunofluorescence)
AAA327024 staining HeLa cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody, diluted at 1/600, was used as secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-EEF2K antibody	Description: This gene encodes a highly conserved protein kinase in the calmodulin-mediated signaling pathway that links activation of cell surface receptors to cell division. This kinase is involved in the regulation of protein synthesis. It phosphorylates eukaryotic elongation factor 2 (EEF2) and thus inhibits the EEF2 function. The activity of this kinase is increased in many cancers and may be a valid target for anti-cancer treatment. Function: Threonine kinase that regulates protein synthesis by controlling the rate of peptide chain elongation. Upon activation by a variety of upstream kinases including AMPK or TRPM7, phosphorylates the elongation factor EEF2 at a single site, renders it unable to bind ribosomes and thus inactive. In turn, the rate of protein synthesis is reduced. Subunit Structure: Monomer or homodimer (Probable). Interacts with Calmodulin/CALM1; this interaction is strictly required for phosphorylation activity (PubMed:11015200). Post-translational Modifications: Autophosphorylated at multiple residues, Thr-348 being the major site. Phosphorylated by AMP-activated protein kinase AMPK at Ser-398 leading to EE2F2K activation and protein synthesis inhibition. Phosphorylated by TRPM7 at Ser-78 resulting in improved protein stability, higher EE2F phosphorylated and subsequently reduced rate of protein synthesis. Phosphorylation by other kinases such as CDK1 and MAPK13 at Ser-359 or RPS6KA1 and RPS6KB1 at Ser-366 instead decrease EE2F2K activity and promote protein synthesis. Similarity: Belongs to the protein kinase superfamily. Alpha-type protein kinase family.
References	Deng Z, Luo P, Lai W, Song T, Peng J, Wei HK; Journal: Biochem Biophys Res Commun. Myostatin inhibits eEF2K-eEF2 by regulating AMPK to suppress protein synthesis.

NCBI AND UNIPROT INFORMATION

NCBI GI #	9558749
NCBI GeneID	29904
NCBI Accession #	NP_037434.1
NCBI GenBank Nucleotide #	NM_013302.3
UniProt Accession #	O00418; Q8N588
Molecular Weight	Observed: 82 kDa Predicted: 83 kDa
NCBI Official Full Name	eukaryotic elongation factor 2 kinase
NCBI Official Synonym Full Names	eukaryotic elongation factor 2 kinase
NCBI Official Symbol	EEF2K
NCBI Official Synonym Symbols	eEF-2K; CaMKIII; HSU93850
NCBI Protein Information	eukaryotic elongation factor 2 kinase
UniProt Protein Name	Eukaryotic elongation factor 2 kinase
UniProt Gene Name	EEF2K
UniProt Synonym Gene Names	eEF-2 kinase; eEF-2K

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/eef2k-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/327024>