

Rabbit eIF2 alpha Polyclonal Antibody | anti-eIF2 alpha antibody

Phospho-eIF2 alpha (Tyr150) Antibody

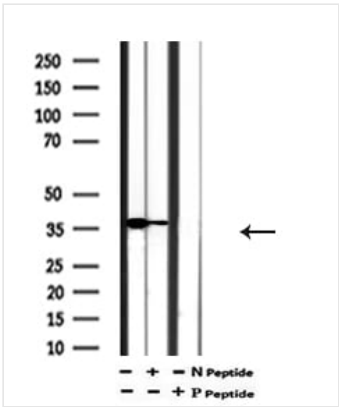
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA328356	Rabbit	Human, Mouse, RatPredicted: Bovine, Horse, Sheep, Dog, Chicken, Xenopus	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

eIF2 alpha; Polyclonal Antibody; Phospho-eIF2 alpha (Tyr150) Antibody; EIF 2 alpha; EIF 2; EIF 2A; EIF 2alpha; eIF-2-alpha; eIF-2A; EIF-2alpha; EIF2 alpha; EIF2; EIF2A; EIF2S1; Eukaryotic translation initiation factor 2 subunit 1 alpha 35kDa; Eukaryotic translation initiation factor 2 subunit 1 alpha; Eukaryotic translation initiation factor 2 subunit 1; Eukaryotic translation initiation factor 2 subunit alpha; IF2A_HUMAN; anti-eIF2 alpha antibody

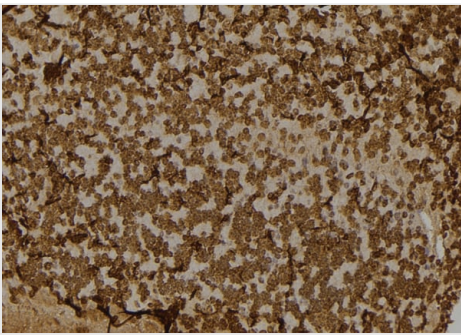
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted: Bovine, Horse, Sheep, Dog, Chicken, Xenopus
Clonality	Polyclonal
Isotype	IgG
Specificity	Phospho-eIF2 alpha (Tyr150) Antibody detects endogenous levels of eIF2 alpha only when phosphorylated at Tyr150.
Purity/Purification	Purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.
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	315
Applicable Applications for anti-eIF2 alpha antibody	ELISA (Peptide ELISA), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human eIF2 alpha around the phosphorylation site of Tyr150.
Subcellular Location	Cytoplasmic Granule. The cytoplasmic granules are stress granules which are a dense aggregation in the cytosol composed of proteins and RNAs that appear when the cell is under stress. Colocalizes with NANOS3 in the stress granules (By similarity).
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



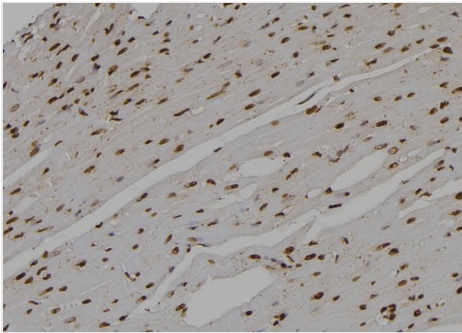
WB (Western Blot)

Western blot analysis of Phospho-eIF2 alpha (Tyr150) in lysates of K562 IFN 1000U/ml 18h, using Phospho-eIF2 alpha (Tyr150) Antibody.



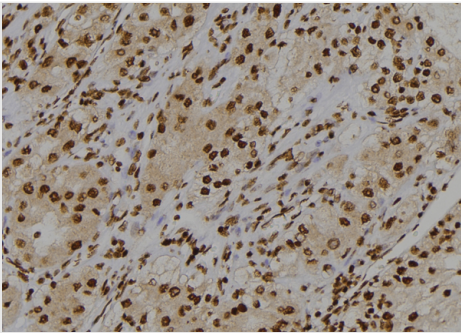
IHC (Immunohistochemistry)

At 1/100 staining mouse brain tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue 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



IHC (Immunohistochemistry)

At 1/100 staining rat heart tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue 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



IHC (Immunohistochemistry)

At 1/100 staining human kidney tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue 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-eIF2 alpha antibody	Description: Functions in the early steps of protein synthesis by forming a ternary complex with GTP and initiator tRNA. This complex binds to a 40S ribosomal subunit, followed by mRNA binding to form a 43S pre-initiation complex. Junction of the 60S ribosomal subunit to form the 80S initiation complex is preceded by hydrolysis of the GTP bound to eIF-2 and release of an eIF-2-GDP binary complex. In order for eIF-2 to recycle and catalyze another round of initiation, the GDP bound to eIF-2 must exchange with GTP by way of a reaction catalyzed by eIF-2B. Post Translational Modifications: Substrate for at least 4 kinases: EIF2AK1/HRI, EIF2AK2/PKR, EIF2AK3/PERK and EIF2AK4/GCN2. Phosphorylation stabilizes the eIF-2/GDP/eIF-2B complex and prevents GDP/GTP exchange reaction, thus impairing the recycling of eIF-2 between successive rounds of initiation and leading to global inhibition of translation (PubMed:15207627, PubMed:18032499). Phosphorylated; phosphorylation on Ser-52 by the EIF2AK4/GCN2 protein kinase occurs in response to amino acid starvation and UV irradiation (By similarity). Subunit Structure: Heterotrimer composed of an alpha, a beta and a gamma chain (PubMed:23063529). Component of an EIF2 complex at least composed of CELF1/CUGBP1, CALR, CALR3, EIF2S1, EIF2S2, HSP90B1 and HSPA5. Interaction with METAP2 protects EIF2S1 from inhibitory phosphorylation (By similarity). Interacts with ABCF1 isoform 2 (PubMed:17894550). Associates with ribosomes (PubMed:17894550). Similarity: Belongs to the eIF-2-alpha family.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4758256
NCBI GeneID	1965

NCBI Accession #	NP_004085.1
NCBI GenBank Nucleotide #	NP_004085.1
UniProt Accession #	P05198
Molecular Weight	Observed: 38 kDa Predicted: 37 kDa
NCBI Official Full Name	eukaryotic translation initiation factor 2 subunit 1
NCBI Official Synonym Full Names	eukaryotic translation initiation factor 2 subunit alpha
NCBI Official Symbol	EIF2S1
NCBI Official Synonym Symbols	EIF2; EIF-2; EIF2A; EIF-2A; EIF-2alpha
NCBI Protein Information	eukaryotic translation initiation factor 2 subunit 1
UniProt Protein Name	Eukaryotic translation initiation factor 2 subunit 1
UniProt Gene Name	EIF2S1
UniProt Synonym Gene Names	EIF2A; eIF-2-alpha; eIF-2A; eIF-2alpha
UniProt Entry Name	IF2A_HUMAN

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/eif2-alpha-antibody-peptide-elisa-immunohistochemistry-western-blot-elisa/328356>