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eIF1A Rabbit mAb

Catalog # AP75385

Product Information

Application	WB, IHC-P, IHC-F, IP
Primary Accession	P47813
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	16460

Additional Information

Gene ID	1964
Other Names	EIF1AX
Dilution	WB~~1:1000-1:5000 IHC-P~~N/A IHC-F~~N/A IP~~1:10-1:100
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

Name	EIF1AX
Synonyms	EIF1A, EIF4C
Function	Component of the 43S pre-initiation complex (43S PIC), which binds to the mRNA cap-proximal region, scans mRNA 5'-untranslated region, and locates the initiation codon (PubMed:9732867). This protein enhances formation of the cap-proximal complex (PubMed:9732867). Together with EIF1, facilitates scanning, start codon recognition, promotion of the assembly of 48S complex at the initiation codon (43S PIC becomes 48S PIC after the start codon is reached), and dissociation of aberrant complexes (PubMed:9732867). After start codon location, together with EIF5B orients the initiator methionine-tRNA in a conformation that allows 60S ribosomal subunit joining to form the 80S initiation complex (PubMed:35732735). Is released after 80S initiation complex formation, just after GTP hydrolysis by EIF5B, and before release of EIF5B (PubMed:35732735). Its globular part is located in the A site of the 40S ribosomal subunit (PubMed:35732735). Its interaction with EIF5

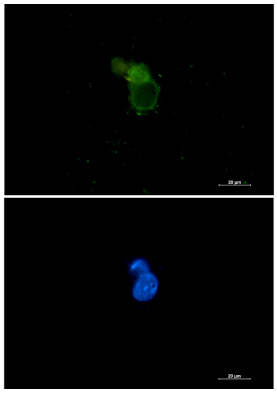
during scanning contribute to the maintenance of EIF1 within the open 43S PIC (PubMed:24319994). In contrast to yeast orthologs, does not bind EIF1 (PubMed:24319994).

Cellular Location Cytoplasm.

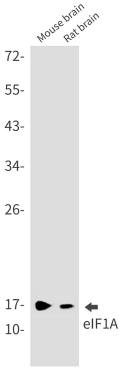
Background

Eukaryotic translation initiation factor 1A, X-chromosome(EIF1AX), designated as to distinguish from the Y-linked homolog, has an unblocked N-terminal proline, which was consistent with the general pattern of eukaryotic protein. It's may be required for maximal rate of protein biosynthesis. Like EIF4C, it enhances ribosome dissociation into subunits and stabilizeds the binding of the initiator Met-tRNA(I) to 40S ribosomal subunits.

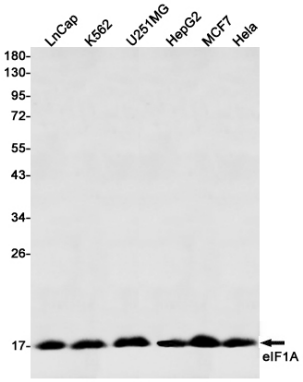
Images



Immunocytochemistry analysis of eIF1A (green) in 293 using eIF1A antibody,and DAPI(blue).

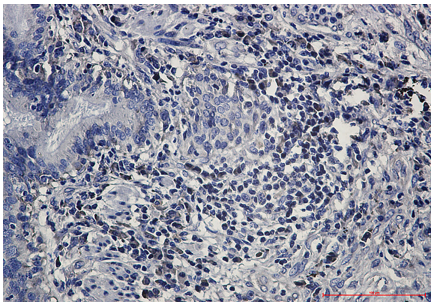


Western blot analysis of eIF1A in mouse brain, rat brain lysates using eIF1A antibody.



Western blot analysis of eIF1A in LnCap, K562, U251MG, HepG2, MCF-7, Hela lysates using eIF1A antibody

Immunohistochemistry analysis of paraffin-embedded Human lung cancer using eIF1A antibody.High-pressure and temperature Sodium Citrate pH 6.0 was used for



antigen retrieval.

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