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eIF1A Antibody

Rabbit mAb
Catalog # AP92982

Product Information

Application	WB, IHC, IF, FC, ICC, IP, IHF
Primary Accession	P47813
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	EIF1A; EIF1AP1; EIF1AX; EIF4C;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	16460

Additional Information

Dilution	WB 1:500~1:2000 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 eIF1A
Description	eIF1A is an essential eukaryotic translation initiation factor. The protein is required for the binding of the 43S complex (a 40S subunit, eIF2/GTP/Met-tRNAi and eIF3) to the 5' end of capped RNA (referenced from entrez gene).
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.

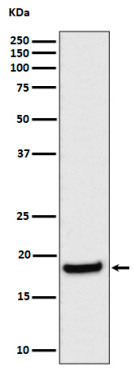
Protein Information

Name	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.

Images



Western blot analysis of eIF1A expression in HeLa cell lysate.

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