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# eIF1A Antibody

Rabbit mAb
Catalog # AP92971

## Product Information

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

## Additional Information

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|---|---|
| **Dilution** | WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 IP 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. |

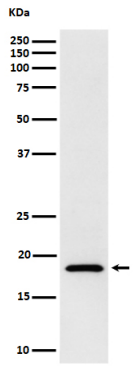
## Protein Information

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|---|---|
| **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 Jurkat cell lysate.

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