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eIF4A2 Rabbit pAb

Catalog # AP98835

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q14240
Other Accession	Q14240
Reactivity	Rat
Predicted	Pig, Human, Mouse, Chicken, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	46402
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human eIF4A2
Epitope Specificity	141-240/407
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the DEAD box helicase family. eIF4A subfamily.Contains 1 helicase ATP-binding domain.Contains 1 helicase C-terminal domain.
SUBUNIT	eIF4F is a multi-subunit complex, the composition of which varies with external and internal environmental conditions. It is composed of at least EIF4A, EIF4E and EIF4G1/EIFFG3 (By similarity). Interacts with EIF4E. May interact with NOM1. Interacts with HHV-1 Vhs.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Translation initiation in eukaryotes necessitates the assembly of an 80S ribosomal complex. Eukaryotic initiation factors (eIFs) are utilized in a sequence of reactions that leads to 80S ribosomal assembly and initiation of translation. Mammalian eukaryotic translation initiation factor 4F (eIF4F) is a protein complex that contains eIF4A, eIF4E and eIF4G, binds mRNA at a 5′-cap motif and recruits the 43S ribosomal preinitiation complex to the eligible transcript. Along with eIF4B, the eIF4F complex mediates the unwinding of mRNA secondary structure to facilitate ribosome association. eIF4E specifically interacts with the 5′ cap, eIF4A(I,II) are bidirectional RNA helicases, and eIF4G(I,II) are scaffolding proteins which coordinate eIF4E, eIF4A, eIF3 and the 40S ribosome. Human eIF4AI (eIF4A, DDX2A) is a 406 amino acid protein that is 92.7% homologous to mouse eIF4AI. The promoter region of human eIF4A1 contains TATA and CAAT motifs and consensus binding sites to Sp1 and AP2.

Additional Information

Gene ID	1974
Other Names	IF4A2_CHICK; EIF4A2; eIF-4A-II; eIF4A-II; ATP-dependent RNA helicase eIF4A-2; 3.6.4.13; IF4A2_BOVIN; IF4A2_HUMAN; DDX2B; EIF4F; IF4A2_MOUSE;

	IF4A2_RAT; eukaryotic translation initiation factor 4A2; eukaryotic translation initiation factor 4A, isoform 2
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	EIF4A2
Synonyms	DDX2B, EIF4F
Function	ATP-dependent RNA helicase which is a subunit of the eIF4F complex involved in cap recognition and is required for mRNA binding to ribosome. In the current model of translation initiation, eIF4A unwinds RNA secondary structures in the 5'-UTR of mRNAs which is necessary to allow efficient binding of the small ribosomal subunit, and subsequent scanning for the initiator codon.

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