10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

EIF4A2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9190B

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q14240
Other Accession	Q5RKI1, P10630, Q4R4Y9, Q8JFP1, Q3SZ65, P29562, P60843, Q4R8K5, P60842, Q3SZ54
Reactivity	Human
Predicted	Bovine, Monkey, Mouse, Rabbit, Chicken, Rat, Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB23766
Calculated MW	46402
Antigen Region	333-360

Additional Information

Gene ID	1974
Other Names	Eukaryotic initiation factor 4A-II, eIF-4A-II, eIF4A-II, ATP-dependent RNA helicase eIF4A-2, EIF4A2, DDX2B, EIF4F
Target/Specificity	This EIF4A2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 333-360 amino acids from the C-terminal region of human EIF4A2.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	EIF4A2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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.

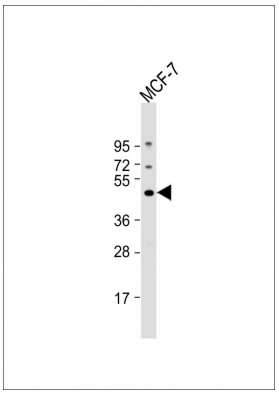
Background

Eukaryotic initiation factor 4A plays an important role in the binding of mRNA to the 43S preinitiation complex when protein synthesis begins. Two highly homologous forms of functional EIF4A genes, Eif4a1 and Eif4a2, have been isolated in mice; yeast cells also possess 2 EIF4A genes, TIF1 and TIF2. The murine Eif4a and yeast TIF genes appear to belong to a DEAD-box gene family, whose members exhibit extensive amino acid similarity and contain the asp-glu-ala-asp (DEAD) sequence. DEAD-box genes have been identified in species ranging from E-coli to humans. Their function appears to be related to transcriptional/translational regulation (referenced from OMIM).

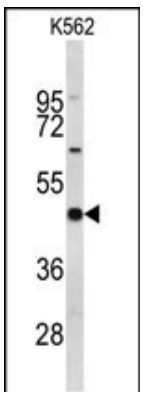
References

Martins-de-Souza,D., et.al., J Neural Transm 116 (3), 275-289 (2009)
Lin,C.J., et.al., Cancer Res. 68 (13), 5326-5334 (2008)

Images

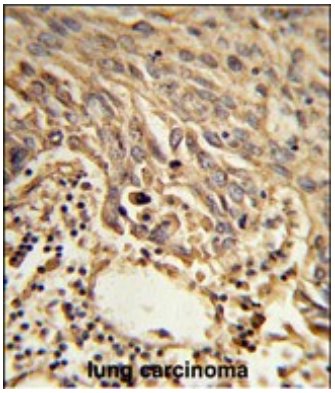


Anti-EIF4A2 Antibody (C-term) at 1:4000 dilution + MCF-7 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 46 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

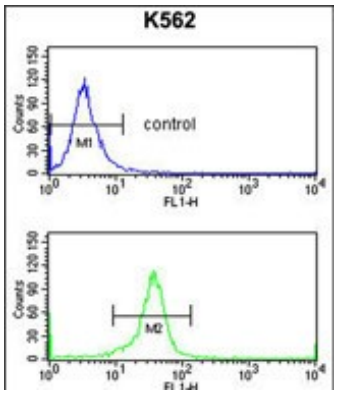


Western blot analysis of EIF4A2 Antibody (C-term) (Cat. #AP9190b) in K562 cell line lysates (35ug/lane). EIF4A2 (arrow) was detected using the purified Pab.

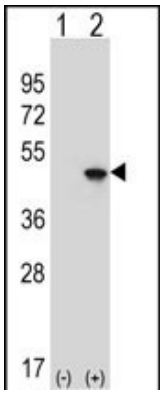
Formalin-fixed and paraffin-embedded human lung carcinoma reacted with EIF4A2 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical



relevance has not been evaluated.



EIF4A2 Antibody (C-term) (Cat. #AP9190b) flow cytometry analysis of K562 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



Western blot analysis of EIF4A2 (arrow) using rabbit polyclonal EIF4A2 Antibody (C-term) (Cat. #AP9190b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the EIF4A2 gene.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.