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EIF4A1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7262a

Product Information

Application	WB, IHC-P, E
Primary Accession	P60842
Other Accession	P60843, Q4R8K5, Q3SZ54
Reactivity	Human
Predicted	Mouse, Monkey, Bovine, Rat, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB14513
Calculated MW	46154
Antigen Region	1-30

Additional Information

Gene ID	1973
Other Names	Eukaryotic initiation factor 4A-I, eIF-4A-I, eIF4A-I, ATP-dependent RNA helicase eIF4A-1, EIF4A1, DDX2A, EIF4A
Target/Specificity	This EIF4A1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human EIF4A1.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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	EIF4A1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	EIF4A1
Synonyms	DDX2A, EIF4A

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 (PubMed:20156963). 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. As a result, promotes cell proliferation and growth (PubMed:20156963).
Cellular Location	Cytoplasm, perinuclear region. Cell membrane. Cytoplasm, Stress granule. Note=Colocalizes with PKP1 in stress granules following arsenate or hydrogen peroxide treatment

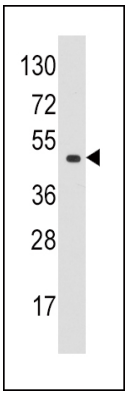
Background

EIF4A1 is an 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.

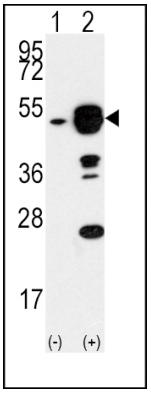
References

Suzuki,C., Proc. Natl. Acad. Sci. U.S.A. 105 (9), 3274-3279 (2008) Kim,W.J., EMBO J. 26 (24), 5020-5032 (2007)

Images

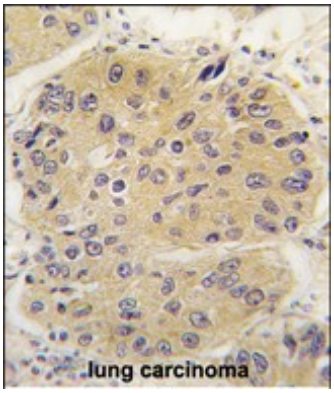


Western blot analysis of anti-EIF4A1 Pab (Cat. #AP7262a) in K562 cell line lysates (35ug/lane). EIF4A1(arrow) was detected using the purified Pab.



Western blot analysis of EIF4A1 (arrow) using rabbit polyclonal EIF4A1 Antibody (N-term) (Cat.#AP7262a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the EIF4A1 gene (Lane 2) (Origene Technologies).

Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with EIF4A1 antibody (N-term) (Cat.#AP7262a), 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.

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