

**EIF4A1 Antibody (N-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP7262a****Specification**

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**EIF4A1 Antibody (N-term) - Product Information**

Application	IHC-P, WB,E
Primary Accession	<a href="#">P60842</a>
Other Accession	<a href="#">P60843</a> , <a href="#">Q4R8K5</a> , <a href="#">Q3SZ54</a>
Reactivity	Human
Predicted	Bovine, Monkey, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	46154
Antigen Region	1-30

**EIF4A1 Antibody (N-term) - 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**

IHC-P~~1:10~50

WB~~1:1000

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.

**EIF4A1 Antibody (N-term) - 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**

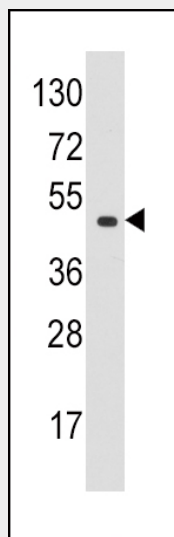
Cytoplasm, perinuclear region. Cell membrane. Cytoplasm, Stress granule. Note=Colocalizes with PKP1 in stress granules following arsenate or hydrogen peroxide treatment

**EIF4A1 Antibody (N-term) - Protocols**

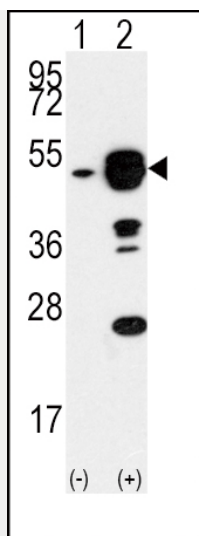
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

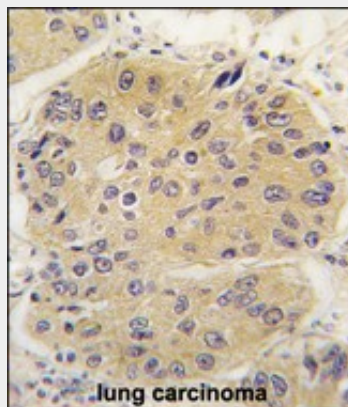
**EIF4A1 Antibody (N-term) - Images**



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.

#### **EIF4A1 Antibody (N-term) - 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.

#### **EIF4A1 Antibody (N-term) - 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)