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

Anti-eIF4AI Antibody
Mouse monoclonal antibody to eIF4AI
Catalog # AP61578

Specification

Anti-eIF4AI Antibody - Product Information

Application	**WB, IF/IC, IHC**
Primary Accession	P60842
Other Accession	P60843
Reactivity	**Human, Mouse, Rat**
Host	**Mouse**
Clonality	**Monoclonal**
Calculated MW	**46154**

Anti-eIF4AI Antibody - Additional Information

Gene ID 1973

Other Names
DDX2A; EIF4A; Eukaryotic initiation factor 4A-I; eIF-4A-I; eIF4A-I; ATP-dependent RNA helicase eIF4A-1

Target/Specificity
Recognizes endogenous levels of eIF4AI protein.

Dilution
WB~~WB (1/1000 - 1/3000), IH (1/100 - 1/200), IF/IC (1/100 - 1/200)
IF/IC~~N/A
IHC~~1:100~500

Format
Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage
Store at -20 °C.Stable for 12 months from date of receipt

Anti-eIF4AI Antibody - 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).

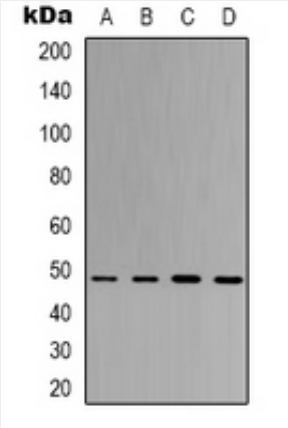
Cellular Location
Cytoplasm, perinuclear region. Cell membrane. Cytoplasm, Stress granule. Note=Colocalizes with PKP1 in stress granules following arsenate or hydrogen peroxide treatment

Anti-eIF4AI Antibody - Protocols

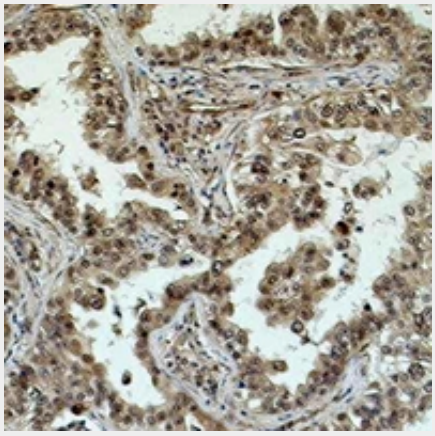
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-eIF4AI Antibody - Images

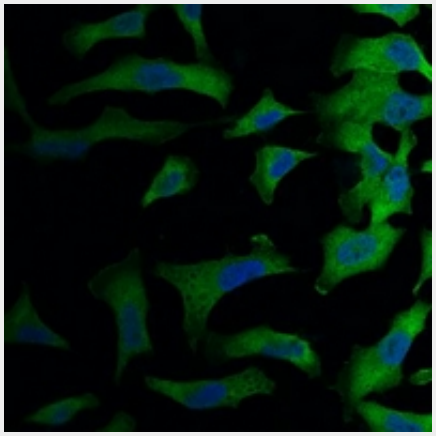


Western blot analysis of eIF4AI expression in 293T (A), Hela (B), HepG2 (C), mouse brain (D) whole cell lysates.



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

Immunohistochemical analysis of eIF4AI staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of eIF4AI staining in Hela cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a FITC-conjugated secondary antibody (green) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

Anti-eIF4AI Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence of human eIF4AI. The exact sequence is proprietary.