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Anti-eIF4AI Antibody

Mouse monoclonal antibody to eIF4AI
Catalog # AP61578

Product Information

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

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	KLH-conjugated synthetic peptide encompassing a sequence of human eIF4AI. The exact sequence is proprietary.
Dilution	WB~~WB (1/1000 - 1/3000), IHC (1/100 - 1/200), IF/IC (1/100 - 1/200) IF/IC~~N/A IHC~~WB (1/1000 - 1/3000), IHC (1/100 - 1/200), IF/IC (1/100 - 1/200)
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

Protein Information

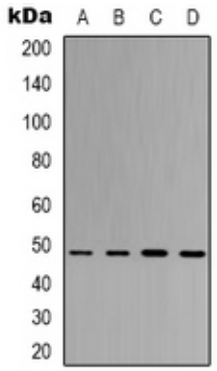
Name	EIF4A1
Synonyms	DDX2A, EIF4A
Function	ATP-dependent RNA helicase which is a subunit of the eIF4F complex involved in cap recognition and is required for mRNA binding to ribosome (PubMed:20156963). In the current model of translation initiation, eIF4A unwinds RNA secondary structures in the 5'-UTR 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). Cytoplasm, perinuclear region. Cell membrane. Cytoplasm, Stress granule.

Cellular Location	Note=Colocalizes with PKP1 in stress granules following arsenate or hydrogen peroxide treatment

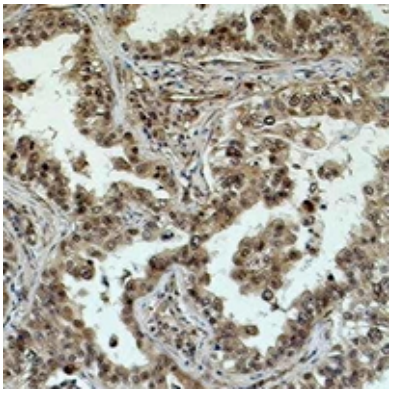
Background

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

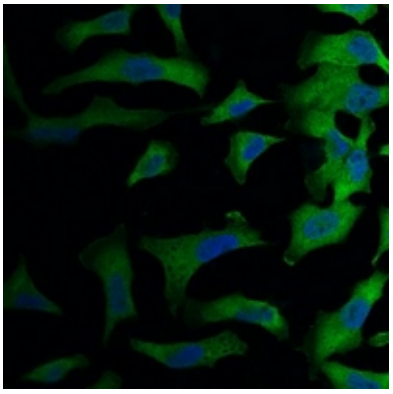
Images



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



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).