

Anti-eIF4A1 Rabbit Monoclonal Antibody

Catalog # ABO15319

Product Information

Application	WB, IF, ICC, FC
Primary Accession	P60842
Host	Rabbit
Isotype	IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-eIF4A1 Rabbit Monoclonal Antibody . Tested in WB, ICC/IF, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

Additional Information

Gene ID	1973
Other Names	Eukaryotic initiation factor 4A-I, eIF-4A-I, eIF4A-I, 3.6.4.13, ATP-dependent RNA helicase eIF4A-1, EIF4A1, DDX2A, EIF4A
Calculated MW	46154
Application Details	WB 1:500-1:2000 ICC/IF 1:50-1:200 FC 1:50
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names Immunogen	Clone: 18E95 A synthesized peptide derived from human eIF4A1
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

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

Images

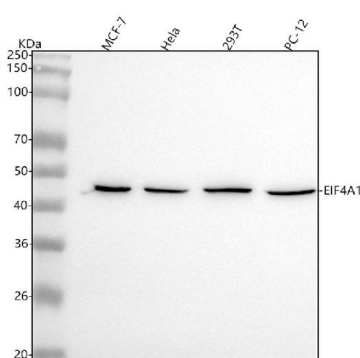


Figure 1. Western blot analysis of EIF4A1 using anti-EIF4A1 antibody (M03922-3).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human MCF-7 whole cell lysates,

Lane 2: human HeLa whole cell lysates,

Lane 3: human 293T whole cell lysates,

Lane 4: rat PC-12 whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-EIF4A1 antigen affinity purified monoclonal antibody (Catalog # M03922-3) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:500 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for EIF4A1 at approximately 46 kDa. The expected band size for EIF4A1 is at 46 kDa.

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