

# eIF4A1 Monoclonal Antibody(M8)

Catalog # AP63375

### **Product Information**

**Application** WB, IHC-P, IF, ICC

Primary Accession P60842

**Reactivity** Human, Mouse, Rat

HostMouseClonalityMonoclonalCalculated MW46154

#### **Additional Information**

**Gene ID** 1973

Other Names Eukaryotic initiation factor 4A-I (eIF-4A-I) (eIF4A-I) (EC 3.6.4.13)

(ATP-dependent RNA helicase eIF4A-1)

**Dilution** WB~~WB: 1:1000-3000 IF: 1:100-200 IHC 1:50-300 IHC-P~~WB: 1:1000-3000

IF: 1:100-200 IHC 1:50-300 IF~~WB: 1:1000-3000 IF: 1:100-200 IHC 1:50-300

ICC~~N/A

Format PBS, pH 7.4, containing 0.09% (W/V) sodium azide as Preservative and 50%

Glycerol.

Storage Conditions -20°C

#### **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.

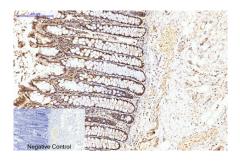
Note=Colocalizes with PKP1 in stress granules following arsenate or hydrogen

peroxide treatment

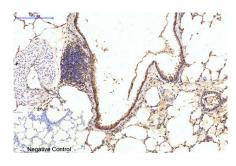
# Background

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.

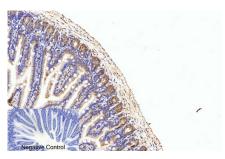
## **Images**



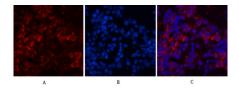
Immunohistochemical analysis of paraffin-embedded Human-colon-cancer tissue. 1,eIF4A1 Monoclonal Antibody(M8) was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



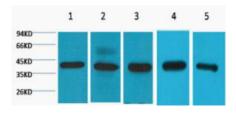
Immunohistochemical analysis of paraffin-embedded Rat-lung tissue. 1,eIF4A1 Monoclonal Antibody(M8) was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



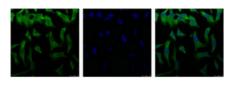
Immunohistochemical analysis of paraffin-embedded Mouse-colon tissue. 1,eIF4A1 Monoclonal Antibody(M8) was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



Immunofluorescence analysis of Mouse-spleen tissue. 1,eIF4A1 Monoclonal Antibody(M8)(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Western blot analysis of 1) 293T, 2) Hela, 3) HepG2, 4) Mouse Brain tissue,



IF analysis of Hela with antibody (Left) and DAPI (Right) diluted at 1:100.