

eIF4A1 Monoclonal Antibody(M8)

Catalog # AP63375

Specification

eIF4A1 Monoclonal Antibody(M8) - Product Information

Application WB, IHC-P, IF Primary Accession P60842

Reactivity Human, Mouse, Rat

Host Mouse Clonality Monoclonal

eIF4A1 Monoclonal Antibody(M8) - 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~~N/A

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

Format

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

Storage Conditions

-20°C

eIF4A1 Monoclonal Antibody(M8) - 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

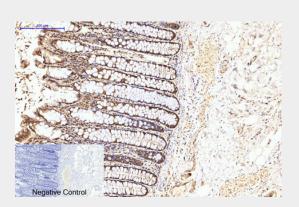


eIF4A1 Monoclonal Antibody(M8) - Protocols

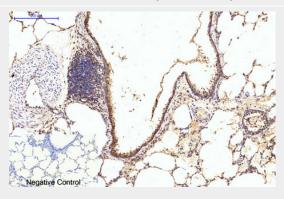
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

eIF4A1 Monoclonal Antibody(M8) - Images

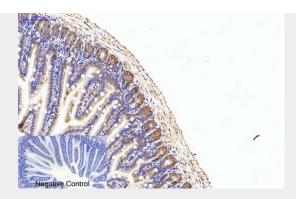


Immunohistochemical analysis of paraffin-embedded Human-colon-cancer tissue. 1,eIF4A1 Monoclonal Antibody(M8) was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control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

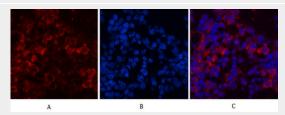


Immunohistochemical analysis of paraffin-embedded Rat-lung tissue. 1,eIF4A1 Monoclonal Antibody(M8) was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used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

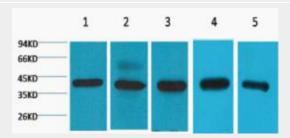




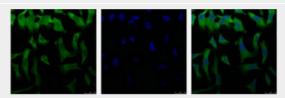
Immunohistochemical analysis of paraffin-embedded Mouse-colon tissue. 1,eIF4A1 Monoclonal Antibody(M8) was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used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

eIF4A1 Monoclonal Antibody(M8) - 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.