

EIF5A Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO2010a**Specification****EIF5A Antibody - Product Information**

Application	WB, IHC, FC, E
Primary Accession	P63241
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	16.8kDa KDa

Description

EIF5A (eukaryotic translation initiation factor 5A) is a protein-coding gene. Diseases associated with EIF5A include lung adenocarcinoma, and intrahepatic cholangiocarcinoma, and among its related super-pathways are Post-translational protein modification and Apoptotic Pathways in Synovial Fibroblasts. GO annotations related to this gene include ribosome binding and RNA binding. An important paralog of this gene is EIF5AL1.

Immunogen

Purified recombinant fragment of human EIF5A (AA:1-154) expressed in E. Coli.

Formulation

Purified antibody in PBS with 0.05% sodium azide

EIF5A Antibody - Additional Information

Gene ID 1984

Other Names

Eukaryotic translation initiation factor 5A-1, eIF-5A-1, eIF-5A1, Eukaryotic initiation factor 5A isoform 1, eIF-5A, Rev-binding factor, eIF-4D, EIF5A

Dilution

WB~~1/500 - 1/2000
IHC~~1/200 - 1/1000
FC~~1/200 - 1/400
E~~1/10000

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

EIF5A Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

EIF5A Antibody - Protein Information

Name EIF5A ([HGNC:3300](#))

Function

Translation factor that promotes translation elongation and termination, particularly upon ribosome stalling at specific amino acid sequence contexts (PubMed:33547280). Binds between the exit (E) and peptidyl (P) site of the ribosome and promotes rescue of stalled ribosome: specifically required for efficient translation of polyproline-containing peptides as well as other motifs that stall the ribosome (By similarity). Acts as a ribosome quality control (RQC) cofactor by joining the RQC complex to facilitate peptidyl transfer during CAT tailing step (By similarity). Also involved in actin dynamics and cell cycle progression, mRNA decay and probably in a pathway involved in stress response and maintenance of cell wall integrity (PubMed:16987817). With syntenin SDCBP, functions as a regulator of p53/TP53 and p53/TP53-dependent apoptosis (PubMed:15371445). Also regulates TNF-alpha-mediated apoptosis (PubMed:15452064, PubMed:17187778). Mediates effects of polyamines on neuronal process extension and survival (PubMed:17360499). Is required for autophagy by assisting the ribosome in translating the ATG3 protein at a specific amino acid sequence, the 'ASP-ASP-Gly' motif, leading to the increase of the efficiency of ATG3 translation and facilitation of LC3B lipidation and autophagosome formation (PubMed:29712776).

Cellular Location

Cytoplasm. Nucleus. Endoplasmic reticulum membrane; Peripheral membrane protein; Cytoplasmic side. Note=Hypusine modification promotes the nuclear export and cytoplasmic localization and there was a dynamic shift in the localization from predominantly cytoplasmic to primarily nuclear under apoptotic inducing conditions (PubMed:19379712, PubMed:27306458). Nuclear export of hypusinated protein is mediated by XPO4 (PubMed:10944119, PubMed:27306458).

Tissue Location

Expressed in umbilical vein endothelial cells and several cancer cell lines (at protein level)

EIF5A 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 Cytometry](#)
- [Cell Culture](#)

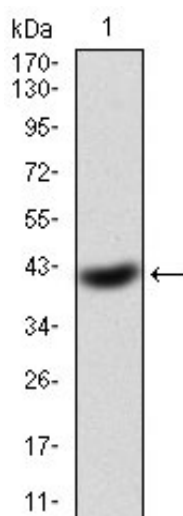
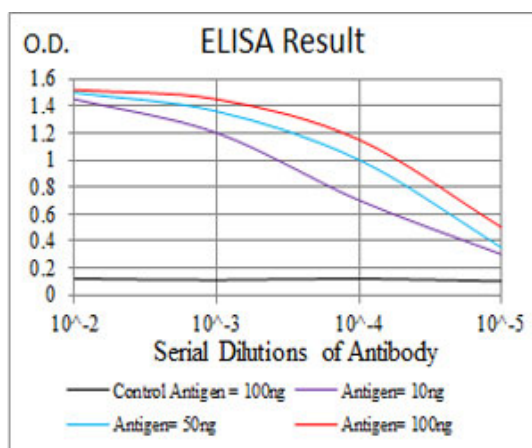


Figure 1: Western blot analysis using EIF5A mAb against human EIF5A(AA: 1-154) recombinant protein. (Expected MW is 42.8 kDa)

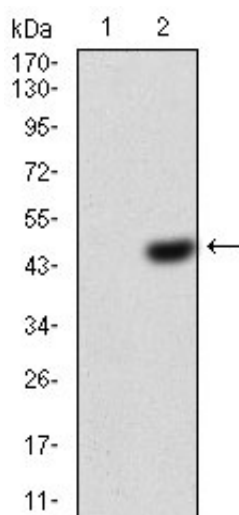


Figure 2: Western blot analysis using EIF5A mAb against HEK293 (1) and EIF5A (AA: 1-154)-hIgGFc transfected HEK293 (2) cell lysate.

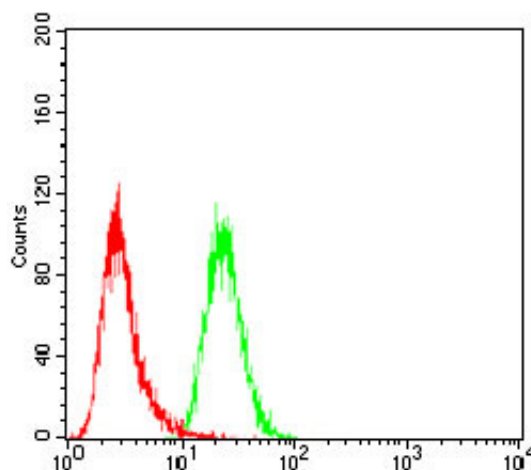


Figure 3: Flow cytometric analysis of Hela cells using EIF5A mouse mAb (green) and negative control (red).

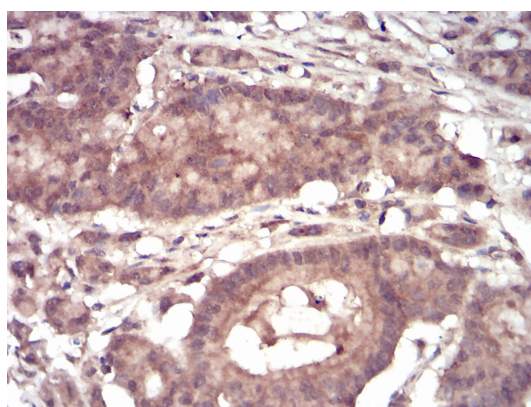


Figure 4: Immunohistochemical analysis of paraffin-embedded colon cancer tissues using EIF5A mouse mAb with DAB staining.

EIF5A Antibody - References

Int J Cancer. 2011 Jul 1;129(1):143-50. Int J Cancer. 2010 Aug 15;127(4):968-76.