

EIF5A Antibody (N-Terminus)

Goat Polyclonal Antibody Catalog # ALS13707

Specification

EIF5A Antibody (N-Terminus) - Product Information

Application WB, IHC
Primary Accession P63241
Reactivity Human
Host Goat
Clonality Polyclonal
Calculated MW 17kDa KDa

EIF5A Antibody (N-Terminus) - 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

Target/Specificity

Human EIF5A. Reported variants NP_001137233.1, NP_001961.1 and NP_001137234.1 represent identical protein:

Reconstitution & Storage

Store at -20°C. Minimize freezing and thawing.

Precautions

EIF5A Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

EIF5A Antibody (N-Terminus) - 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). Regulates also 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 (N-Terminus) - Protocols

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

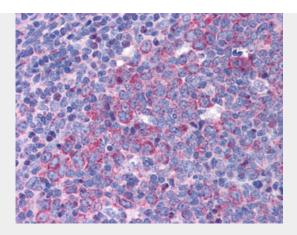
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

EIF5A Antibody (N-Terminus) - Images



EIF5A antibody (0.1 ug/ml) staining of MOLT4 lysate (35 ug protein in RIPA buffer).





Anti-EIF5A antibody IHC of human tonsil.

EIF5A Antibody (N-Terminus) - Background

mRNA-binding protein involved in translation elongation. Has an important function at the level of mRNA turnover, probably acting downstream of decapping. 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. With syntenin SDCBP, functions as a regulator of p53/TP53 and p53/TP53-dependent apoptosis. Regulates also TNF- alpha-mediated apoptosis. Mediates effects of polyamines on neuronal process extension and survival. May play an important role in brain development and function, and in skeletal muscle stem cell differentiation. Also described as a cellular cofactor of human T-cell leukemia virus type I (HTLV-1) Rex protein and of human immunodeficiency virus type 1 (HIV-1) Rev protein, essential for mRNA export of retroviral transcripts.

EIF5A Antibody (N-Terminus) - References

Smit-Mcbride Z.,et al.J. Biol. Chem. 264:1578-1583(1989).
Ruhl M.,et al.J. Cell Biol. 123:1309-1320(1993).
Koettnitz K.,et al.Gene 144:249-252(1994).
Koettnitz K.,et al.Gene 159:283-284(1995).
Johansson H.E.,et al.Submitted (JUL-2002) to the EMBL/GenBank/DDBJ databases.