

# EIF5A Antibody

Purified Rabbit Polyclonal Antibody (Pab)  
Catalog # AP52004

## Product Information

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<b>Application</b>	WB
<b>Primary Accession</b>	<a href="#">P63241</a>
<b>Reactivity</b>	Human, Mouse, Rat
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	16832

## Additional Information

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<b>Gene ID</b>	1984
<b>Other Names</b>	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
<b>Target/Specificity</b>	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human EIF5A. The exact sequence is proprietary.
<b>Dilution</b>	WB~~ 1:1000
<b>Format</b>	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
<b>Storage</b>	Store at -20 °C. Stable for 12 months from date of receipt

## Protein Information

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<b>Name</b>	EIF5A ( <a href="#">HGNC:3300</a> )
<b>Function</b>	Translation factor that promotes translation elongation and termination, particularly upon ribosome stalling at specific amino acid sequence contexts (PubMed: <a href="#">33547280</a> ). 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: <a href="#">16987817</a> ). With syntenin SDCBP, functions as a regulator of p53/TP53 and p53/TP53-dependent apoptosis (PubMed: <a href="#">15371445</a> ). Also regulates TNF-mediated apoptosis (PubMed: <a href="#">15452064</a> , PubMed: <a href="#">17187778</a> ). Mediates effects of polyamines on neuronal process extension and survival (PubMed: <a href="#">17360499</a> ). 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)

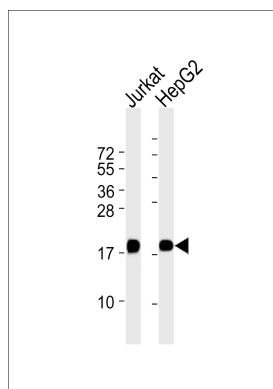
## Background

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.

## 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/DBJ databases.

## Images



All lanes : Anti-EIF5A Antibody at 1:1000 dilution Lane 1: Jurkat whole cell lysates Lane 2: HepG2 whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 17 kDa Blocking/Dilution buffer: 5% NFDN/TBST.

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