

RPS3A Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP5529b

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P61247
Other Accession	P49242 , P97351 , Q4R4Z6 , Q56JV9 , Q801S3 , NP_000997.1
Reactivity	Human
Predicted	Xenopus, Bovine, Monkey, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB21295
Calculated MW	29945
Antigen Region	228-254

Additional Information

Gene ID	6189
Other Names	40S ribosomal protein S3a {ECO:0000255 HAMAP-Rule:MF_03122}, v-fos transformation effector protein, Fte-1, RPS3A {ECO:0000255 HAMAP-Rule:MF_03122}, FTE1, MFTL
Target/Specificity	This RPS3A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 228-254 amino acids from the C-terminal region of human RPS3A.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	RPS3A Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	RPS3A {ECO:0000255 HAMAP-Rule:MF_03122}
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Synonyms

FTE1, MFTL

Function

Component of the small ribosomal subunit. The ribosome is a large ribonucleoprotein complex responsible for the synthesis of proteins in the cell (PubMed:[23636399](#)). Part of the small subunit (SSU) processome, first precursor of the small eukaryotic ribosomal subunit. During the assembly of the SSU processome in the nucleolus, many ribosome biogenesis factors, an RNA chaperone and ribosomal proteins associate with the nascent pre-rRNA and work in concert to generate RNA folding, modifications, rearrangements and cleavage as well as targeted degradation of pre-ribosomal RNA by the RNA exosome (PubMed:[34516797](#)). May play a role during erythropoiesis through regulation of transcription factor DDIT3 (By similarity).

Cellular Location

Cytoplasm {ECO:0000255|HAMAP-Rule:MF_03122, ECO:0000269|PubMed:17289661, ECO:0000269|PubMed:23636399}. Nucleus {ECO:0000255|HAMAP-Rule:MF_03122}. Nucleus, nucleolus. Note=Localized in cytoplasmic mRNP granules containing untranslated mRNAs

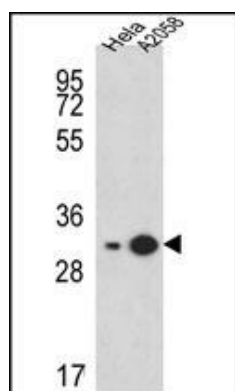
Background

Ribosomes, the organelles that catalyze protein synthesis, consist of a small 40S subunit and a large 60S subunit. Together these subunits are composed of 4 RNA species and approximately 80 structurally distinct proteins. This gene encodes a ribosomal protein that is a component of the 40S subunit. The protein belongs to the S3AE family of ribosomal proteins. It is located in the cytoplasm. Disruption of the gene encoding rat ribosomal protein S3a, also named v-fos transformation effector protein, in v-fos-transformed rat cells results in reversion of the transformed phenotype. Transcript variants utilizing alternative transcription start sites have been described. This gene is co-transcribed with the U73A and U73B small nucleolar RNA genes, which are located in its fourth and third introns, respectively. As is typical for genes encoding ribosomal proteins, there are multiple processed pseudogenes of this gene dispersed through the genome.

References

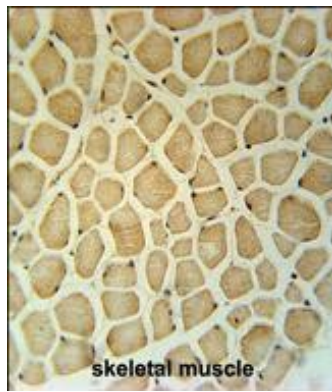
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Sugiyama, N., et al. Mol. Cell Proteomics 6(6):1103-1109(2007)
Jonson, L., et al. Mol. Cell Proteomics 6(5):798-811(2007)
Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) :

Images

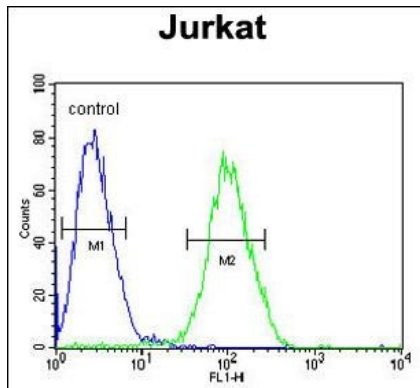


RPS3A Antibody (C-term) (Cat. #AP5529b) western blot analysis in HeLa,A2058 cell line lysates (15ug/lane).This demonstrates the RPS3A antibody detected the RPS3A protein (arrow).

RPS3A Antibody (C-term) (Cat. #AP5529b) immunohistochemistry analysis in formalin fixed and paraffin embedded human skeletal muscle followed by



peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the RPS3A Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



RPS3A Antibody (C-term) (Cat. #AP5529b) flow cytometric analysis of Jurkat cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.