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PUS1 Rabbit mAb

Catalog # AP75979

Product Information

Application	WB, FC, IP
Primary Accession	Q9Y606
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	47470

Additional Information

Gene ID	80324
Other Names	PUS1
Dilution	WB~~1:500-1:1000 FC~~1:200-1:500 IP~~1:20-1:50
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

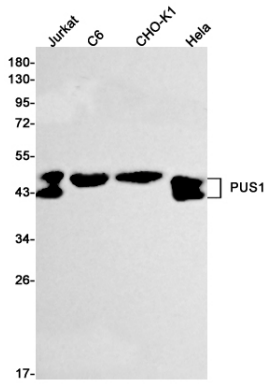
Name	PUS1 {ECO:0000303|PubMed:17056637, ECO:0000312|HGNC:HGNC:15508}
Function	Pseudouridylate synthase that catalyzes pseudouridylation of tRNAs and mRNAs (PubMed:15772074, PubMed:24722331). Acts on positions 27/28 in the anticodon stem and also positions 34 and 36 in the anticodon of an intron containing tRNA (PubMed:24722331). Also catalyzes pseudouridylation of mRNAs: mediates pseudouridylation of mRNAs with the consensus sequence 5'-UGUAG-3' (PubMed:31477916, PubMed:35051350). Acts as a regulator of pre-mRNA splicing by mediating pseudouridylation of pre-mRNAs at locations associated with alternatively spliced regions (PubMed:35051350). Pseudouridylation of pre-mRNAs near splice sites directly regulates mRNA splicing and mRNA 3'-end processing (PubMed:35051350). Involved in regulation of nuclear receptor activity through pseudouridylation of SRA1 mRNA (PubMed:24722331).
Cellular Location	[Isoform 1]: Mitochondrion

Tissue Location	Widely expressed (PubMed:15108122). High levels of expression found in brain and skeletal muscle (PubMed:15108122)

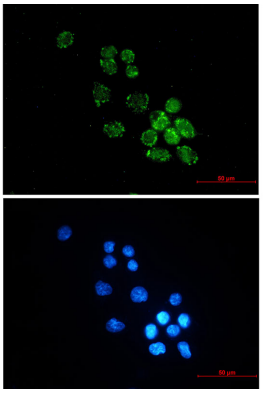
Background

Converts specific uridines to PSI in a number of tRNA substrates. Acts on positions 27/28 in the anticodon stem and also positions 34 and 36 in the anticodon of an intron containing tRNA. Involved in regulation of nuclear receptor activity through pseudouridylation of SRA1 RNA.

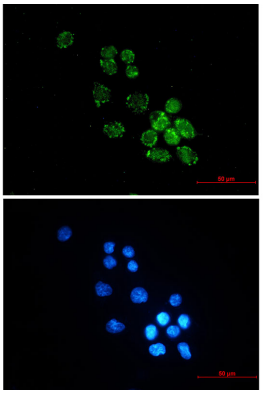
Images

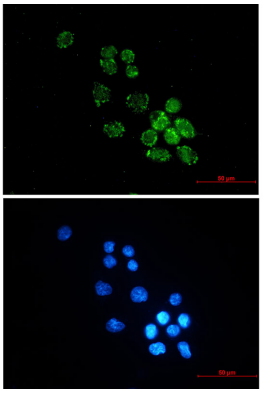


Western blot analysis of PUS1 in Jurkat, C6, CHO-K1, Hela lysates using PUS1 antibody.



Immunocytochemistry analysis of PUS1 (green) in MCF-7 using PUS1 antibody,and DAPI(blue)





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