

TRUB1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP12789c

Product Information

Application	WB, IHC-P, E
Primary Accession	Q8WWH5
Other Accession	NP_631908.1
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB31419
Calculated MW	37253
Antigen Region	152-180

Additional Information

Gene ID	142940
Other Names	Probable tRNA pseudouridine synthase 1, 5499-, TRUB1, PUS4
Target/Specificity	This TRUB1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 152-180 amino acids from the Central region of human TRUB1.
Dilution	WB~~1:1000 IHC-P~~1:100~500 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	TRUB1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TRUB1 {ECO:0000303 PubMed:12736709, ECO:0000312 HGNC:HGNC:16060}
Function	Pseudouridine synthase that catalyzes pseudouridylation of mRNAs and tRNAs (PubMed: 28073919 , PubMed: 31477916 , PubMed: 32926445). Mediates

pseudouridylation of mRNAs with the consensus sequence 5'-GUUCNANNC-3', harboring a stem-loop structure (PubMed:[28073919](#), PubMed:[31477916](#)). Constitutes the major pseudouridine synthase acting on mRNAs (PubMed:[28073919](#)). Also catalyzes pseudouridylation of some tRNAs, including synthesis of pseudouridine(55) from uracil-55, in the psi GC loop of a subset of tRNAs (PubMed:[32926445](#), PubMed:[33023933](#)). Promotes the processing of pri-let-7 microRNAs (pri-miRNAs) independently of its RNA pseudouridylate synthase activity (PubMed:[32926445](#)). Acts by binding to the stem-loop structure on pri- let-7, preventing LIN28-binding (LIN28A and/or LIN28B), thereby enhancing the interaction between pri-let-7 and the microprocessor DGCR8, which mediates miRNA maturation (PubMed:[32926445](#)).

Cellular Location

Nucleus. Cytoplasm, cytosol. Note=Catalyzes pseudouridylation of mRNAs in the nucleus.

Tissue Location

Highly expressed in heart, skeletal muscle and liver. Expressed at lower levels in lung, small intestine, kidney and spleen.

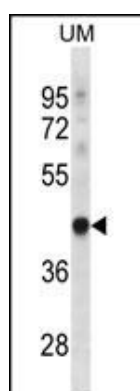
Background

Pseudouridine is an abundant component of rRNAs and tRNAs and is enzymatically generated by isomerization of uridine by pseudouridine synthase (Zucchini et al., 2003 [PubMed 12736709]).

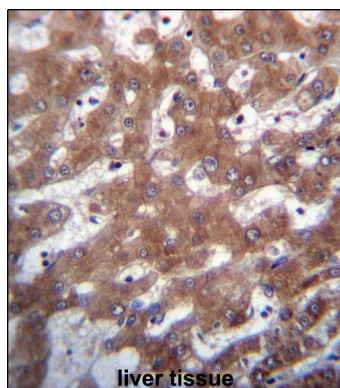
References

Grupe, A., et al. Am. J. Hum. Genet. 78(1):78-88(2006)
 Deloukas, P., et al. Nature 429(6990):375-381(2004)
 Zucchini, C., et al. Int. J. Mol. Med. 11(6):697-704(2003)

Images



TRUB1 Antibody (Center) (Cat. #AP12789c) western blot analysis in uterus tumor cell line lysates (35ug/lane). This demonstrates the TRUB1 antibody detected the TRUB1 protein (arrow).



TRUB1 Antibody (Center) (Cat. #AP12789c) immunohistochemistry analysis in formalin fixed and paraffin embedded human liver tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of TRUB1 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

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