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THOC1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16257b

Product Information

Application	WB, E
Primary Accession	Q96FV9
Other Accession	NP_005122.2
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB35377
Calculated MW	75666
Antigen Region	541-570

Additional Information

Gene ID	9984
Other Names	THO complex subunit 1, Tho1, Nuclear matrix protein p84, p84N5, hTREX84, THOC1, HPR1
Target/Specificity	This THOC1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 541-570 amino acids from the C-terminal region of human THOC1.
Dilution	WB~~1:1000 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	THOC1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	THOC1
Synonyms	HPR1

Function	Component of the THO subcomplex of the TREX complex which is thought to couple mRNA transcription, processing and nuclear export, and which specifically associates with spliced mRNA and not with unspliced pre-mRNA (PubMed:15833825, PubMed:15998806, PubMed:17190602). Required for efficient export of polyadenylated RNA (PubMed:23222130). The THOC1-THOC2-THOC3 core complex alone is sufficient to bind export factor NXF1-NXT1 and promote ATPase activity of DDX39B/UAP56 (PubMed:33191911). TREX is recruited to spliced mRNAs by a transcription-independent mechanism, binds to mRNA upstream of the exon-junction complex (EJC) and is recruited in a splicing- and cap- dependent manner to a region near the 5' end of the mRNA where it functions in mRNA export to the cytoplasm via the TAP/NXF1 pathway (PubMed:15833825, PubMed:15998806, PubMed:17190602). Regulates transcriptional elongation of a subset of genes (PubMed:22144908). Involved in genome stability by preventing co-transcriptional R-loop formation (By similarity). May play a role in hair cell formation, hence may be involved in hearing (By similarity).
Cellular Location	[Isoform 1]: Nucleus speckle. Nucleus, nucleoplasm. Nucleus matrix. Cytoplasm. Note=Can shuttle between the nucleus and cytoplasm. Nuclear localization is required for induction of apoptotic cell death. Translocates to the cytoplasm during the early phase of apoptosis execution
Tissue Location	Ubiquitous. Expressed in various cancer cell lines. Expressed at very low levels in normal breast epithelial cells and highly expressed in breast tumors. Expression is strongly associated with an aggressive phenotype of breast tumors and expression correlates with tumor size and the metastatic state of the tumor progression

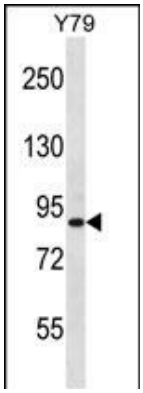
Background

HPR1 is part of the TREX (transcription/export) complex, which includes TEX1 (MIM 606929), THO2 (MIM 300395), ALY (MIM 604171), and UAP56 (MIM 142560).

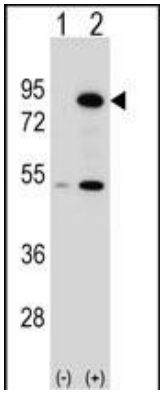
References

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Images



THOC1 Antibody (C-term) (Cat. #AP16257b) western blot analysis in Y79 cell line lysates (35ug/lane).This demonstrates the THOC1 antibody detected the THOC1 protein (arrow).



Western blot analysis of THOC1 (arrow) using rabbit polyclonal THOC1 Antibody (C-term) (Cat. #AP16257b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the THOC1 gene.

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