

## **THOC1 Antibody (C-term)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP16257b

## **Specification**

## THOC1 Antibody (C-term) - Product Information

**Application** WB,E **Primary Accession** 096FV9 NP 005122.2 Other Accession Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 75666 Antigen Region 541-570

## THOC1 Antibody (C-term) - 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

## **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.

## THOC1 Antibody (C-term) - Protein Information

## Name THOC1

### Synonyms HPR1



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Function Required for efficient export of polyadenylated RNA. Acts as 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 premRNA. 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/NFX1 pathway. The TREX complex is essential for the export of Kaposi's sarcoma-associated herpesvirus (KSHV) intronless mRNAs and infectious virus production. Regulates transcriptional elongation of a subset of genes. Involved in genome stability by preventing co-transcriptional R-loop formation. 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**

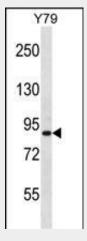
Ubiquitous. Expressed in various cancer cell lines. Expressed at very low levels in normal breast epithelial cells and highly expressed in breast tumors. Expression is strongly associated with an aggressive phenotype of breast tumors and expression correlates with tumor size and the metastatic state of the tumor progression

### **THOC1** Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

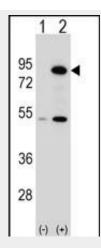
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# THOC1 Antibody (C-term) - 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.

# THOC1 Antibody (C-term) - 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).

## THOC1 Antibody (C-term) - References

Davila, S., et al. Genes Immun. 11(3):232-238(2010) Liu, Y., et al. Mol. Psychiatry (2010) In press: Boyne, J.R., et al. PLoS Pathog. 4 (10), E1000194 (2008): Ferreira, M.A., et al. Nat. Genet. 40(9):1056-1058(2008) Yang, J., et al. Ann. Clin. Lab. Sci. 38(2):105-112(2008)