

## **THO Complex Subunit 1 Rabbit mAb**

**Catalog # AP75825** 

### **Specification**

## **THO Complex Subunit 1 Rabbit mAb - Product Information**

Application WB, ICC
Primary Accession Q96FV9
Reactivity Human
Host Rabbit

Clonality Monoclonal Antibody

Calculated MW 75666

## THO Complex Subunit 1 Rabbit mAb - Additional Information

**Gene ID 9984** 

Other Names THOC1

**Dilution**WB~~1/500-1/1000
ICC~~N/A

Format Liquid

## THO Complex Subunit 1 Rabbit mAb - 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:<a href="http://www.uniprot.org/citations/15833825" target="\_blank">15833825</a>, PubMed:<a href="http://www.uniprot.org/citations/15998806" target="\_blank">15998806</a>, PubMed:<a href="http://www.uniprot.org/citations/17190602" target="\_blank">17190602</a>, Required for efficient export of polyadenylated RNA (PubMed:<a href="http://www.uniprot.org/citations/23222130" target="\_blank">23222130</a>). The THOC1-THOC2-THOC3 core complex alone is sufficient to bind export factor NXF1-NXT1 and promote ATPase activity of DDX39B/UAP56 (PubMed:<a

href="http://www.uniprot.org/citations/33191911" target="\_blank">33191911</a>). 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:<a href="http://www.uniprot.org/citations/15833825" target=" blank">15833825</a>, PubMed:<a href="http://www.uniprot.org/citations/15998806"





target="\_blank">15998806</a>, PubMed:<a href="http://www.uniprot.org/citations/17190602" target="\_blank">17190602</a>). Regulates transcriptional elongation of a subset of genes (PubMed:<a href="http://www.uniprot.org/citations/22144908" target="\_blank">22144908</a>). 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

## **THO Complex Subunit 1 Rabbit mAb - Protocols**

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

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

# THO Complex Subunit 1 Rabbit mAb - Images







