

## THOC1 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP16257b

### **Specification**

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

**Primary Accession** 

**096FV9** 

# THOC1 Antibody (C-term) Blocking Peptide - Additional Information

**Gene ID 9984** 

#### **Other Names**

THO complex subunit 1, Tho1, Nuclear matrix protein p84, p84N5, hTREX84, THOC1, HPR1

#### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

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

Name THOC1

Synonyms HPR1

#### **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 pre- mRNA. 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) Blocking Peptide - Protocols

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

#### Blocking Peptides

THOC1 Antibody (C-term) Blocking Peptide - Images

# THOC1 Antibody (C-term) Blocking Peptide - Background

HPR1 is part of the TREX (transcription/export) complex,which includes TEX1 (MIM 606929), THO2 (MIM 300395), ALY (MIM604171), and UAP56 (MIM 142560).

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