

# p84 / THOC1 Antibody (aa15-374, clone 5E10)

Mouse Monoclonal Antibody Catalog # ALS11871

## **Specification**

## p84 / THOC1 Antibody (aa15-374, clone 5E10) - Product Information

Application IHC
Primary Accession Q96FV9
Reactivity Human
Host Mouse
Clonality Monoclonal
Calculated MW 76kDa KDa

## p84 / THOC1 Antibody (aa15-374, clone 5E10) - Additional Information

### **Gene ID** 9984

#### **Other Names**

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

## Target/Specificity

Amino acids 15-374 of human p84 expressed in E. coli.

### **Reconstitution & Storage**

Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

#### **Precautions**

p84 / THOC1 Antibody (aa15-374, clone 5E10) is for research use only and not for use in diagnostic or therapeutic procedures.

## p84 / THOC1 Antibody (aa15-374, clone 5E10) - 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

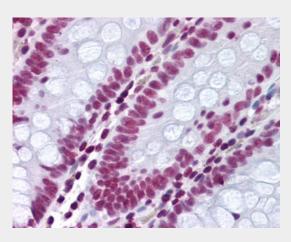
Volume 25 µl

## p84 / THOC1 Antibody (aa15-374, clone 5E10) - Protocols

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

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

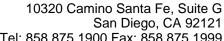
# p84 / THOC1 Antibody (aa15-374, clone 5E10) - Images



Anti-THOC1 antibody IHC of human colon.

# p84 / THOC1 Antibody (aa15-374, clone 5E10) - Background

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Durfee T., et al.J. Cell Biol. 127:609-622(1994). Gasparri F., et al. FEBS Lett. 574:13-19(2004). Ota T., et al. Nat. Genet. 36:40-45(2004). Nusbaum C., et al. Nature 437:551-555(2005). Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.