

# Rabbit Anti-Nuclear Matrix Protein p84 antibody

## SL2448R

Product Name:	Nuclear Matrix Protein p84
Chinese Name:	核基质p84蛋白抗体
Alias:	Death domain containing protein p84N5; HPR 1; HPR1; hTREX84; Nuclear matrix protein p84; P84; P84N5; Tho 1; THO complex 1; THO complex subunit 1; Tho1; THOC 1; THOC1; THOC1 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Horse, Rabbit,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	72kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human HPR1/Nuclear Matrix Protein p84:221-320/657 <extracellular></extracellular>
Lsotype:	lgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	This protein is part of the THO complex (THOC). The THO complex is recruited to transcribed genes and travels with the RNA polymerase during elongation. It may physically link proteins that function in transcription and in RNA export and RNA processing.

#### **Function:**

Component of the THO subcomplex of the TREX complex. The TREX complex specifically associates with spliced mRNA and not with unspliced pre-mRNA. It 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 capdependent manner to a region near the 5' end of the mRNA where it functions in mRNA export. The recruitment occurs via an interaction between ALYREF/THOC4 and the cap-binding protein NCBP1. DDX39B functions as a bridge between ALYREF/THOC4 and the THO complex. The TREX complex is essential for the export of Kaposi's sarcoma-associated herpesvirus (KSHV) intronless mRNAs and infectious virus production. The recruitment of the TREX complex to the intronless viral mRNA occurs via an interaction between KSHV ORF57 protein and ALYREF/THOC4. Regulates transcriptional elongation of a subset of genes. Participates in an apoptotic pathway which is characterized by activation of caspase-6, increases in the expression of BAK1 and BCL2L1 and activation of NF-kappa-B. This pathway does not require p53/TP53, nor does the presence of p53/TP53 affect the efficiency of cell killing. Activates a G2/M cell cycle checkpoint prior to the onset of apoptosis. Apoptosis is inhibited by association with RB1.

#### **Subunit:**

Component of the THO complex, which is composed of THOC1, THOC2, THOC5, THOC6 and THOC7. Together with THOC3, ALYREF/THOC4 and DDX39B, THO forms the transcription/export (TREX) complex. Binds to the hypophosphorylated form of RB1. Interacts with THOC2, DDX39B and RNA polymerase II.

#### **Subcellular 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. Isoform 2: Cytoplasm.

## **Tissue Specificity:**

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.

#### Post-translational modifications:

Expression is altered specifically during apoptosis and is accompanied by the appearance of novel forms with smaller apparent molecular mass.

## Similarity:

Contains 1 death domain.

### **SWISS:**

Q96FV9

**Gene ID:** 9984

## **Database links:**

Entrez Gene: 9984Human

Entrez Gene: 225160Mouse

Entrez Gene: 291797Rat

Omim: 606930Human

SwissProt: Q96FV9Human

SwissProt: Q8R3N6Mouse

SwissProt: P59924Rat

Unigene: 712543Human

Unigene: 219648 Mouse

Unigene: 127881Rat

## **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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