10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

THOC1 Rabbit mAb

Catalog # AP75825

Product Information

Application	WB, IHC-P
Primary Accession	Q96FV9
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	75666

Additional Information

Gene ID	9984
Other Names	THOC1
Dilution	WB~~1:1000-1:5000 IHC-P~~N/A
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

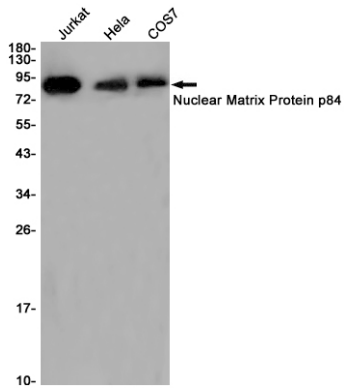
Name	THOC1
Synonyms	HPR1
Function	Component of the THO subcomplex of the TREX complex which is thought to couple mRNA transcription, processing and nuclear export, and which specifically associates with spliced mRNA and not with unspliced pre-mRNA (PubMed:15833825, PubMed:15998806, PubMed:17190602). Required for efficient export of polyadenylated RNA (PubMed:23222130). The THOC1-THOC2-THOC3 core complex alone is sufficient to bind export factor NXF1-NXT1 and promote ATPase activity of DDX39B/UAP56 (PubMed:33191911). 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:15833825, PubMed:15998806, PubMed:17190602). Regulates transcriptional elongation

	of a subset of genes (PubMed:22144908). 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

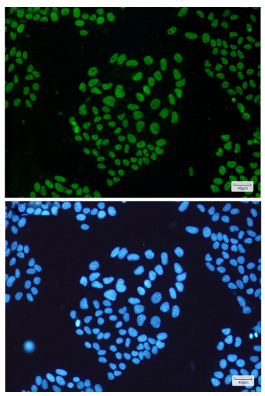
Background

Predicted to enable DNA binding activity and RNA binding activity. Involved in several processes, including negative regulation of DNA damage checkpoint; regulation of nucleobase-containing compound metabolic process; and viral mRNA export from host cell nucleus. Located in cytoplasm and nuclear speck. Part of THO complex part of transcription export complex. Colocalizes with chromosome, telomeric region.

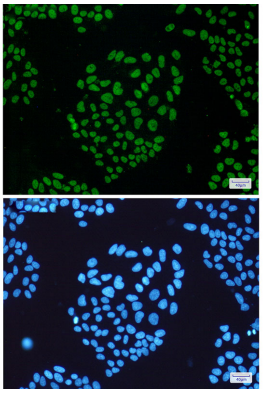
Images



Western blot analysis of Nuclear Matrix Protein p84 in Jurkat, Hela, COS7 lysates using THO Complex Subunit 1 antibody.



Immunocytochemistry analysis of Nuclear Matrix Protein p84(green) in Hela using Nuclear Matrix Protein p84 antibody,and DAPI(blue)



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.