

Anti-Nuclear Matrix Protein p84 Monoclonal Antibody

Catalog # ABO14448

Specification

Anti-Nuclear Matrix Protein p84 Monoclonal Antibody - Product Information

Application Primary Accession Host Isotype Reactivity Clonality Format Description WB, IHC, IF, ICC <u>096FV9</u> Rabbit Rabbit IgG Rat, Human, Mouse Monoclonal Liquid

Anti-Nuclear Matrix Protein p84 Monoclonal Antibody . Tested in WB, IHC, ICC/IF applications. This antibody reacts with Human, Mouse, Rat.

Anti-Nuclear Matrix Protein p84 Monoclonal Antibody - Additional Information

Gene ID 9984

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

Application Details WB 1:1000-1:5000
IHC 1:50-1:200
ICC/IF 1:50-1:200

Contents Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen

A synthesized peptide derived from human Nuclear Matrix Protein p84 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.

Purification Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-Nuclear Matrix Protein p84 Monoclonal Antibody - 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:15998806, PubMed:17190602). Required for efficient export of polyadenylated RNA (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

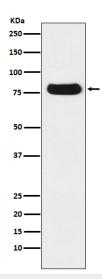
Anti-Nuclear Matrix Protein p84 Monoclonal Antibody - Protocols

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

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

Anti-Nuclear Matrix Protein p84 Monoclonal Antibody - Images





Western blot analysis of Nuclear Matrix Protein p84 expression in HepG2 cell lysate.