# abcam

# Product datasheet

# Anti-Nuclear Matrix Protein p84 antibody [EPR5661] ab125019



# 1 References 4 Images

#### Overview

Product name Anti-Nuclear Matrix Protein p84 antibody [EPR5661]

**Description** Rabbit monoclonal [EPR5661] to Nuclear Matrix Protein p84

Host species Rabbit

Tested applications Suitable for: WB, IHC-P, ICC/IF

Unsuitable for: Flow Cyt or IP

Species reactivity Reacts with: Human

Immunogen Synthetic peptide within Human Nuclear Matrix Protein p84 aa 1-100. The exact sequence is

proprietary.

Positive control HeLa, U-87 MG and 293T cell lysates; Human stomach adenocarcinoma tissue; 293T cells

General notes This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

Improved sensitivity and specificityLong-term security of supply

- Animal-free production

For more information see here.

Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**<sup>®</sup> **patents**.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

these species. Please contact us for more information.

#### **Properties**

Form Liquid

**Storage instructions** Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture

supernatant

**Purity** Protein A purified

Clonality Monoclonal Clone number **EPR5661** 

Isotype lgG

#### **Applications**

#### The Abpromise guarantee

Our Abpromise guarantee covers the use of ab125019 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000 - 1/10000. Detects a band of approximately 84 kDa (predicted molecular weight: 76 kDa).
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
ICC/IF		1/100 - 1/250.

**Application notes** 

Is unsuitable for Flow Cyt or IP.

#### **Target**

## **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 cap-dependent manner to a region near the 5' end of the mRNA where it functions in mRNA export. The recruitment occurs via an interaction between THOC4 and the cap-binding protein NCBP1. DDX39B functions as a bridge between 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 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.

**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.

Sequence similarities

Contains 1 death domain.

**Domain** 

An intact death domain is needed for apoptosis.

Post-translational modifications

Expression is altered specifically during apoptosis and is accompanied by the appearance of

novel forms with smaller apparent molecular mass.

**Cellular localization** 

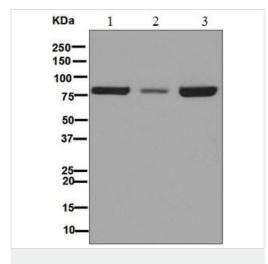
Cytoplasm and Nucleus speckle. Nucleus > nucleoplasm. Nucleus matrix. Cytoplasm. Can shuttle

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.

#### **Form**

Nuclear (Isoform 1) and Cytoplasmic (Isoform 1 and 2).

# **Images**



Western blot - Anti-Nuclear Matrix Protein p84 antibody [EPR5661] (ab125019)

**All lanes :** Anti-Nuclear Matrix Protein p84 antibody [EPR5661] (ab125019) at 1/1000 dilution

Lane 1: Hela cell lysate

Lane 2 : U-87 MG (Human glioblastoma-astrocytoma epithelial cell line) cell lysate

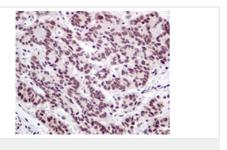
Lane 3: 293T (Human embryonic kidney epithelial cell) cell lysate

Lysates/proteins at 10 µg per lane.

## Secondary

All lanes: HRP labelled goat anti-rabbit at 1/2000 dilution

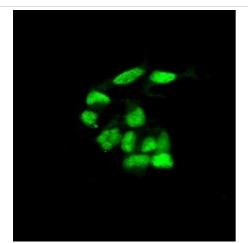
**Predicted band size:** 76 kDa **Observed band size:** 84 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Nuclear Matrix Protein p84 antibody [EPR5661] (ab125019)

ab125019, at 1/50 dilution, staining Nuclear Matrix Protein p84 in paraffin-embedded Human stomach adenocarcinoma tissue by Immunohistochemistry.

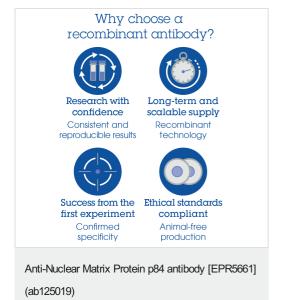
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-Nuclear Matrix Protein p84 antibody [EPR5661]

(ab125019)

ab125019, at 1/100 dilution, staining Nuclear Matrix Protein p84 in 293T cells by Immunofluorescence.



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