abcam

Product datasheet

Anti-Nuclear Matrix Protein p84 antibody [EPR5662(2)] ab131268

Recombinant RabMAb

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Overview

Product name	Anti-Nuclear Matrix Protein p84 antibody [EPR5662(2)]
Description	Rabbit monoclonal [EPR5662(2)] to Nuclear Matrix Protein p84
Host species	Rabbit
Tested applications	**Suitable for:** ICC/IF, WB, IHC-P, Flow Cyt **Unsuitable for:** IP
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide within Human Nuclear Matrix Protein p84 aa 350-450. The exact sequence is proprietary.
Positive control	WB: HeLa, U-87 MG, 293T and HepG2 (ab7900) cell lysates. IHC-P: Human breast carcinoma tissue. ICC/IF: HeLa cells. Flow Cyt: HeLa 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 specificity - Long-term security of supply - Animal-free production For more information see here. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents. Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough. Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility. We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee. In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for. We are also updating the applications & species that this product has been "predicted to work

with," however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

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	Tissue culture supernatant
Clonality	Monoclonal
Clone number	EPR5662(2)
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab131268** 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
ICC/IF		1/100.
WB	★★★★★	1/10000 - 1/50000. 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. (Heat to 98°C, allow to cool for 10-20 minutes)
Flow Cyt		1/120.

Application notes Is unsuitable for 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.

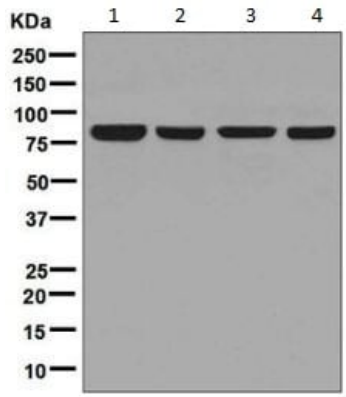
Cellular localization

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 [EPR5662(2)] (ab131268)

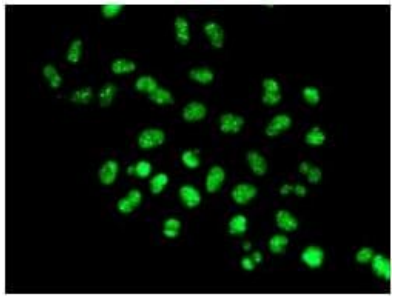
All lanes : Anti-Nuclear Matrix Protein p84 antibody [EPR5662(2)] (ab131268) at 1/10000 dilution

Lane 1 : HeLa cell lysate
Lane 2 : U-87 MG cell lysate
Lane 3 : 293T cell lysate
Lane 4 : HepG2 cell lysate

Lysates/proteins at 10 µg per lane.

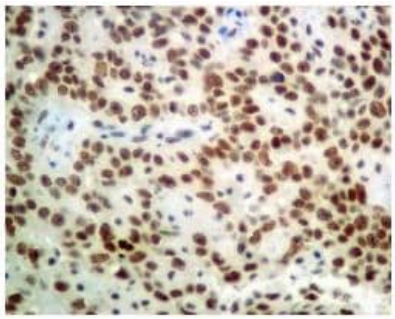
Secondary
All lanes : Goat anti-Rabbit HRP at 1/2000 dilution

Predicted band size: 76 kDa



Immunocytochemistry/ Immunofluorescence - Anti-Nuclear Matrix Protein p84 antibody [EPR5662(2)] (ab131268)

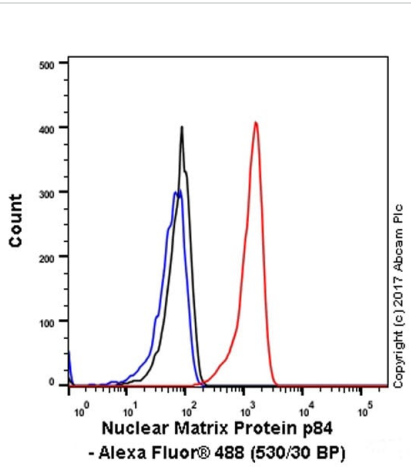
Immunofluorescent staining of HeLa cells labelling Nuclear Matrix Protein p84 with ab131268 at 1/100 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nuclear Matrix Protein p84 antibody [EPR5662(2)] (ab131268)

Immunohistochemical analysis of paraffin embedded human breast carcinoma tissue labeling Nuclear Matrix Protein p84 with ab131268 at 1/50 dilution.

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



Flow Cytometry - Anti-Nuclear Matrix Protein p84 antibody [EPR5662(2)] (ab131268)

Flow Cytometry analysis of HeLa (human cervix adenocarcinoma) cells labeling Nuclear Matrix Protein p84 with purified ab131268 at 1/120 dilution (10ug/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluor® 488)(1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal IgG (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) were used as the unlabeled control.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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