

# Anti-Nuclear Matrix Protein p84 antibody [5E10] ab487

★★★★★ **16 Abreviews** **90 References** 画像数 12

### 製品の概要

製品名	Anti-Nuclear Matrix Protein p84 antibody [5E10]
製品の詳細	Mouse monoclonal [5E10] to Nuclear Matrix Protein p84
由来種	Mouse
アプリケーション	<b>適用あり:</b> WB, ICC/IF, IP, IHC-P, Flow Cyt
種交差性	<b>交差種:</b> Mouse, Rat, Human
免疫原	Fusion protein containing amino acids 15-374 of human p84 expressed in <i>E. coli</i> .
ポジティブ・コントロール	WB: HEK-293T, A431, HeLa, HepG2, A-375, NIH-3T3, PC-12 whole cell lysates; HeLa nuclear lysate, mouse cerebellum, brain tissue lysates. IHC-P: Human lung cancer and breast carcinoma tissue. ICC: HeLa cells. IP: HepG2 whole cell lysate.
特記事項	<p>This product was changed from ascites to tissue culture supernatant on 2<sup>nd</sup> Feb 2019. Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>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, along with publications, customer reviews and Q&amp;As</p>

### 製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
バッファー	pH: 7.40 Constituent: 100% PBS
精製度	Protein G purified
ポリ/モノ	モノクローナル
クローン名	5E10

ミエローマ	NS1
アイソタイプ	IgG2b
軽鎖の種類	kappa

## アプリケーション

**The Abpromise guarantee** **Abpromise保証は、次のテスト済みアプリケーションにおけるab487の使用に適用されます**  
 アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

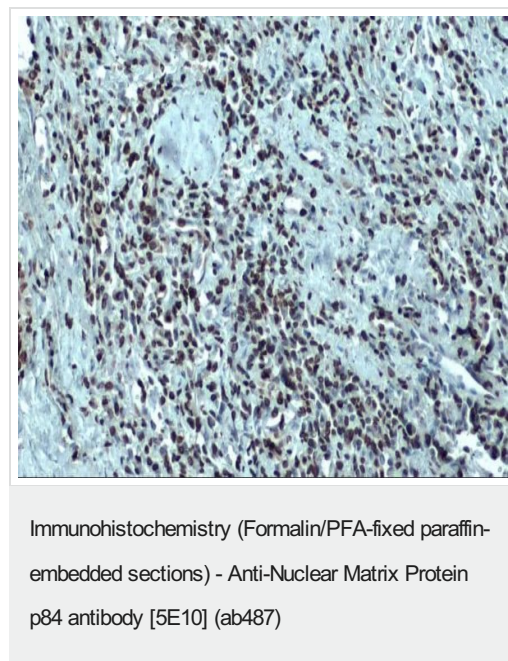
アプリケーション	Abreviews	特記事項
WB	★★★★★ (8)	Use a concentration of 0.3 - 2 µg/ml.
ICC/IF	★★★★★ (2)	Use a concentration of 0.5 - 2 µg/ml.
IP	★★★★★ (1)	Use at an assay dependent concentration.
IHC-P	★★★★★ (2)	Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
Flow Cyt		Use 1µg for 10 <sup>6</sup> cells. <b>ab170192</b> - Mouse monoclonal IgG2b, is suitable for use as an isotype control with this antibody.

## ターゲット情報

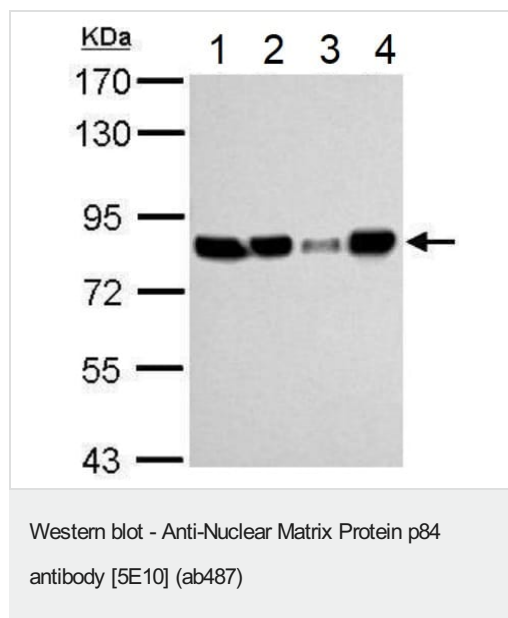
機能	<p>Component of the THO subcomplex of the TREX complex. The TREX complex specifically associates with spliced mRNA and not with unspliced pre-mRNA. It is recruited to spliced mRNAs by a transcription-independent mechanism. Binds to mRNA upstream of the exon-junction complex (EJC) and is recruited 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.</p> <p>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.</p>
組織特異性	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.
配列類似性	Contains 1 death domain.
ドメイン	An intact death domain is needed for apoptosis.

翻訳後修飾	Expression is altered specifically during apoptosis and is accompanied by the appearance of novel forms with smaller apparent molecular mass.
細胞内局在	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.
製品の状態	Nuclear (Isoform 1) and Cytoplasmic (Isoform 1 and 2).

## 画像



Immunohistochemical analysis of human lung cancer tissue labeling Nuclear Matrix Protein p84 at the nucleus with ab487 at 1/100 dilution.



**All lanes** : Anti-Nuclear Matrix Protein p84 antibody [5E10] (ab487) at 1/1000 dilution

**Lane 1** : HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate

**Lane 2** : NIH/3T3 (Mouse embryo fibroblast cell line) whole cell lysate

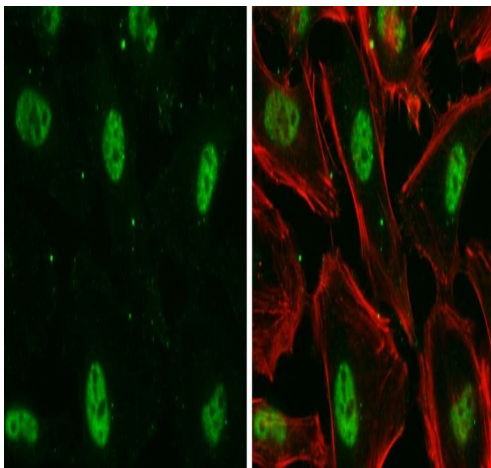
**Lane 3** : Mouse brain tissue lysate

**Lane 4** : PC-12 (Rat adrenal gland pheochromocytoma cell line) whole cell lysate

Lysates/proteins at 30 µg per lane.

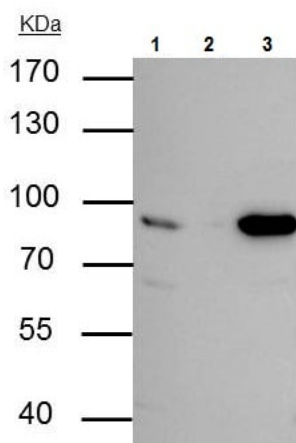
## Secondary

**All lanes** : anti-mouse IgG HRP-conjugated antibody



Immunocytochemistry/ Immunofluorescence - Anti-Nuclear Matrix Protein p84 antibody [5E10] (ab487)

Immunocytochemical analysis of HeLa (Human epithelial cell line from cervix adenocarcinoma) cells labeling Nuclear Matrix Protein p84 at the nucleus with ab487 at 1/500 dilution. Red: phalloidin, a cytoskeleton marker, diluted at 1:100.



Immunoprecipitation - Anti-Nuclear Matrix Protein p84 antibody [5E10] (ab487)

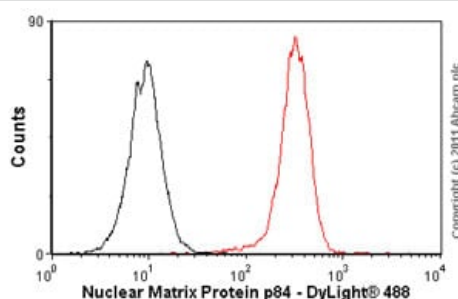
Nuclear Matrix Protein p84 was immunoprecipitated from HepG2 (human liver hepatocellular carcinoma cell line) whole cell lysate with 3 µg ab487. Western blot was performed from the immunoprecipitate using ab487. Anti-Rabbit IgG was used as a secondary reagent.

Lane 1: HepG2 whole cell lysate 30 µg.

Lane 2: Control IP in HepG2 whole cell lysate with 3 µg of pre-immune mouse IgG.

Lane 3: ab487 IP in HepG2 whole cell lysate.

This image was generated using the ascites version of the product.



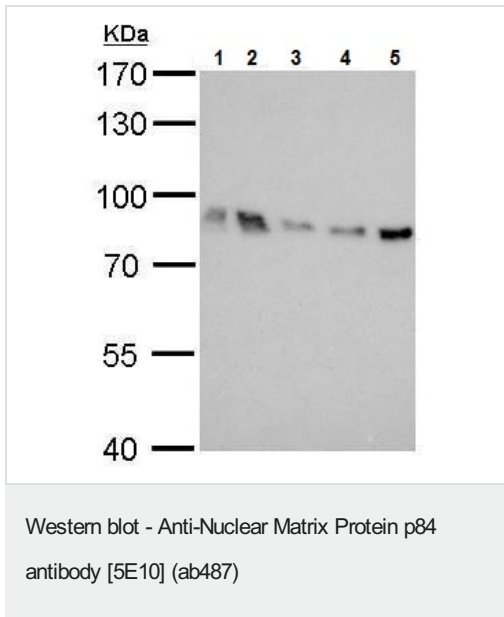
Flow Cytometry - Anti-Nuclear Matrix Protein p84 antibody [5E10] (ab487)

Overlay histogram showing HeLa cells stained with ab487 (red line). The cells were fixed with 100% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab487, 1µg/1x10<sup>6</sup> cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) ([ab96879](#)) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG2b [PLPV219] ([ab91366](#), 2µg/1x10<sup>6</sup> cells) used under the same conditions.

Acquisition of >5,000 events was performed. This antibody gave a positive signal in HeLa cells fixed with 4% paraformaldehyde (10

min)/permeabilized in 0.1% PBS-Tween used under the same conditions.

This image was generated using the ascites version of the product.



**All lanes :** Anti-Nuclear Matrix Protein p84 antibody [5E10] (ab487) at 1/500 dilution

**Lane 1 :** HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate

**Lane 2 :** A431 (human epidermoid carcinoma cell line) whole cell lysate

**Lane 3 :** HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate

**Lane 4 :** HepG2 (human liver hepatocellular carcinoma cell line) whole cell lysate

**Lane 5 :** A-375 (human malignant melanoma cell line) whole cell lysate

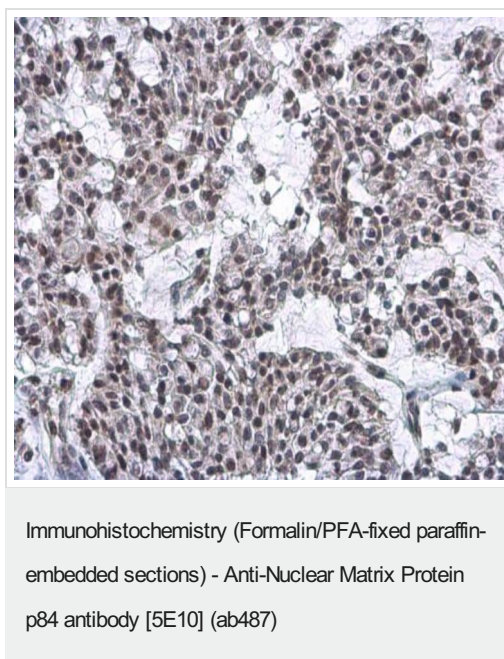
Lysates/proteins at 30 µg per lane.

### Secondary

**All lanes :** HRP-conjugated anti-mouse IgG

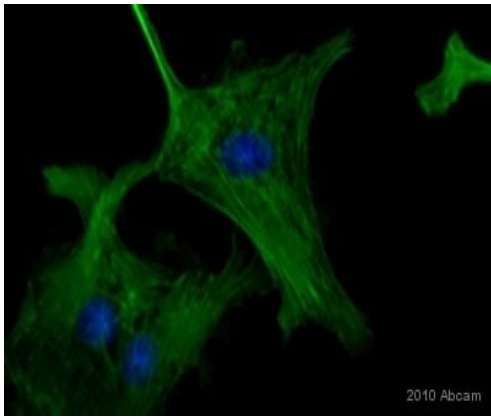
7.5% SDS-PAGE gel.

This image was generated using the ascites version of the product.



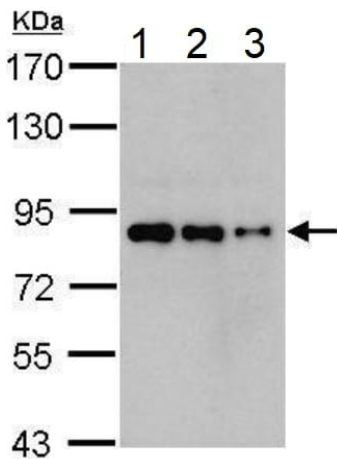
Immunohistochemical analysis of human breast carcinoma tissue labeling Nuclear Matrix Protein p84 at the nucleus with ab487 at 1/200 dilution.





Immunocytochemistry/ Immunofluorescence - Anti-Nuclear Matrix Protein p84 antibody [5E10] (ab487)  
This image is a courtesy of an anonymous Abreview

ab487 staining Nuclear Matrix Protein p84 in Human stomach adenocarcinoma cell line (AGS) by Immunocytochemistry/ Immunofluorescence. The cells were formaldehyde fixed, permeabilised in 0.025% Triton X-100, TBS and then blocked using 5% serum for 1 hour at 23°C. Samples were then incubated with primary antibody at 2µg/ml for 1 hour at 23°C. The secondary antibody used was a goat anti-mouse IgG conjugated to Alexa Fluor® 350 (blue) used undiluted. p84 shows nuclear localization. This image was generated using the ascites version of the product.



Western blot - Anti-Nuclear Matrix Protein p84 antibody [5E10] (ab487)

**All lanes :** Anti-Nuclear Matrix Protein p84 antibody [5E10] (ab487) at 1/1000 dilution

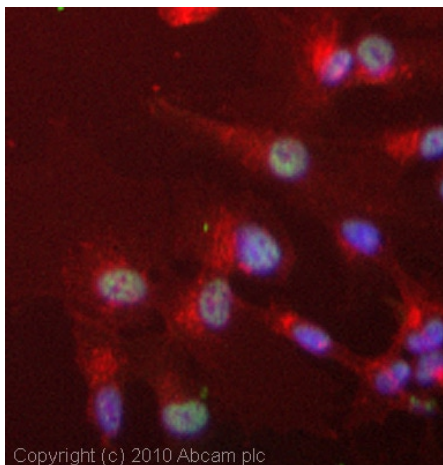
**Lane 1 :** HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate at 20 µg

**Lane 2 :** HEK-293T whole cell lysate at 10 µg

**Lane 3 :** HEK-293T whole cell lysate at 5 µg

#### Secondary

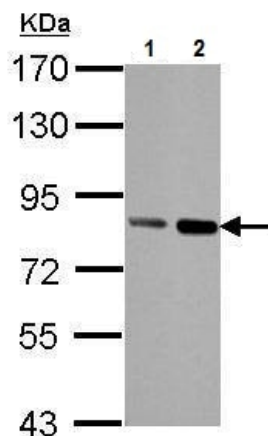
**All lanes :** anti-mouse IgG HRP-conjugated antibody



Immunocytochemistry/ Immunofluorescence - Anti-Nuclear Matrix Protein p84 antibody [5E10] (ab487)

ICC/IF image of ab487 stained HepG2 cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab487, 5µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-mouse IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

This image was generated using the ascites version of the product.



Western blot - Anti-Nuclear Matrix Protein p84 antibody [5E10] (ab487)

**All lanes :** Anti-Nuclear Matrix Protein p84 antibody [5E10] (ab487) at 1/1000 dilution

**Lane 1 :** HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate

**Lane 2 :** HeLa (human epithelial cell line from cervix adenocarcinoma) nuclear lysate

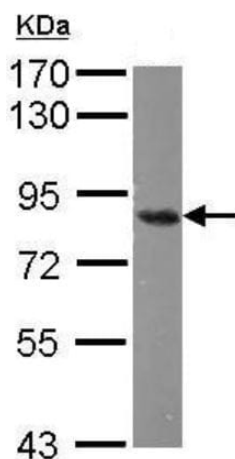
Lysates/proteins at 30 µg per lane.

#### Secondary

**All lanes :** HRP-conjugated anti-mouse IgG

7.5% SDS-PAGE gel.

This image was generated using the ascites version of the product.



Western blot - Anti-Nuclear Matrix Protein p84 antibody [5E10] (ab487)

Anti-Nuclear Matrix Protein p84 antibody [5E10] (ab487) at 1/1000 dilution + Mouse cerebellum tissue lysates at 50 µg

#### Secondary

anti-mouse IgG HRP-conjugated antibody

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