# abcam

# Product datasheet

# Anti-Nucleolin antibody ab22758

★★★★★ 8 Abreviews 166 References 画像数 6

製品の概要

製品名 Anti-Nucleolin antibody

製品の詳細 Rabbit polyclonal to Nucleolin

由来種 Rabbit

特異性 Replenishment batches of our polyclonal antibody, ab22758 are tested in WB. Previous batches

were additionally validated in ICC/IF, IHC-Fr, IHC-P and IP. These applications are still expected

to work and are covered by our Abpromise guarantee. You may also be interested in our

alternative recombinant antibody, ab129200.

アプリケーション 適用あり: WB, IP, IHC-Fr, IHC-P, ICC/IF

種交差性 交差種: Mouse, Rat, Human

免疫原 Synthetic peptide conjugated to KLH derived from within residues 1 - 100 of Human Nucleolin.

Immunogen の所有権に関して (Peptide available as ab25315.)

特記事項

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.

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&As

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

**バッファー** pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising

agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

1

精製度 Immunogen affinity purified

ポリ/モノ ポリクローナル

アイソタイプ lgG

#### アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab22758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	****(4)	Use a concentration of 1 µg/ml. Detects a band of approximately 76 kDa (predicted molecular weight: 76 kDa).
IP	**** <u>(1)</u>	Use at an assay dependent concentration.
IHC-Fr		Use at an assay dependent concentration.
IHC-P		Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
ICC/IF	★★★★☆ (3)	Use a concentration of 1 µg/ml.

#### ターゲット情報

機能 Nucleolin is the major nucleolar protein of growing eukaryotic cells. It is found associated with

intranucleolar chromatin and pre-ribosomal particles. It induces chromatin decondensation by binding to histone H1. It is thought to play a role in pre-rRNA transcription and ribosome assembly. May play a role in the process of transcriptional elongation. Binds RNA

oligonucleotides with 5'-UUAGGG-3' repeats more tightly than the telomeric single-stranded DNA

5'-TTAGGG-3' repeats.

配列類似性 Contains 4 RRM (RNA recognition motif) domains.

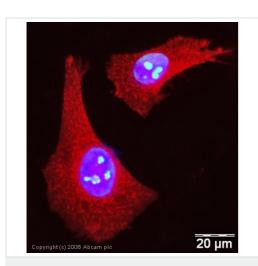
翻訳後修飾 Some glutamate residues are glycylated by TTLL8. This modification occurs exclusively on

glutamate residues and results in a glycine chain on the gamma-carboxyl group.

細胞内局在 Nucleus > nucleolus. Cytoplasm. Localized in cytoplasmic mRNP granules containing untranslated

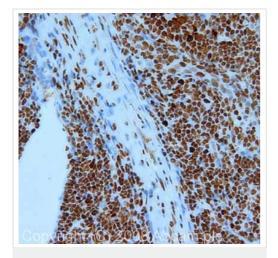
mRNAs.

### 画像



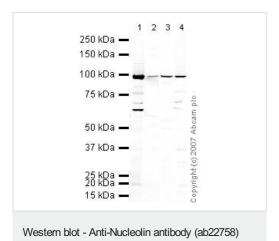
Immunocytochemistry/ Immunofluorescence - Anti-Nucleolin antibody (ab22758)

ICC/IF image of ab22758 stained human HeLa cells. The cells were methanol fixed (5 min) and incubated with the antibody (ab22758, 1µg/ml) for 1h at room temperature. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit lgG (H+L) used at a 1/1000 dilution for 1h. Image-iT<sup>TM</sup>FX Signal Enhancer was used as the primary blocking agent, 5% BSA (in TBS-T) was used for all other blocking steps. DAPI was used to stain the cell nuclei (blue). Alexa Fluor® 594 WGA was used to label plasma membranes (red).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Nucleolin antibody (ab22758)

IHC image of Nucleolin staining in human tonsil FFPE section, performed on a Bond TM system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab22758, 1µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



All lanes: Anti-Nucleolin antibody (ab22758) at 1 µg/ml

Lane 1 : MEF1 (Mouse embryonic fibroblast cell line) Whole Cell Lysate

Lane 2: Brain (Mouse) Tissue Lysate

Lane 3: Pancreas (Mouse) Tissue Lysate

Lane 4: PC12 (Rat adrenal pheochromocytoma cell line) Whole

Cell Lysate

Lysates/proteins at 10 µg per lane.

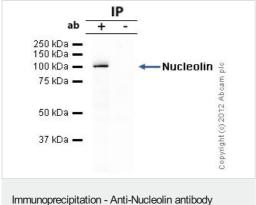
#### Secondary

**All lanes :** IRDye 680 Conjugated Goat Anti-Rabbit lgG (H+L) at 1/10000 dilution

**Predicted band size:** 76 kDa **Observed band size:** 100 kDa

Additional bands at: 60 kDa. We are unsure as to the identity of

these extra bands.



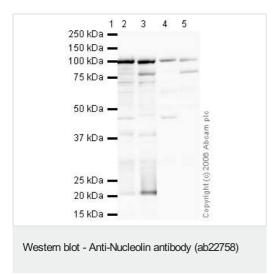
Immunoprecipitation - Anti-Nucleolin antibody (ab22758)

Nucleolin was immunoprecipitated using 0.5mg Jurkat whole cell extract, 5µg of Rabbit polyclonal to Nucleolin and 50µl of protein G magnetic beads (+). No antibody was added to the control (-). The antibody was incubated under agitation with Protein G beads for 10min, Jurkat whole cell extract lysate diluted in RIPA buffer was added to each sample and incubated for a further 10min under agitation.

Proteins were eluted by addition of  $40\mu l$  SDS loading buffer and incubated for 10min at  $70^oC$ ;  $10\mu l$  of each sample was separated on a SDS PAGE gel, transferred to a nitrocellulose membrane, blocked with 5% BSA and probed with ab22758.

Secondary: Mouse monoclonal [SB62a] Secondary Antibody to Rabbit IgG light chain (HRP) (ab99697).

Band: 100kDa: Nucleolin.



Lane 1: Marker

Lanes 2-5 : Anti-Nucleolin antibody (ab22758) at 1  $\mu$ g/ml

Lane 2: Jurkat whole cell lysate (ab7899) at 20 µg

Lane 3: A-431 whole cell lysate (ab7909) at 20 μg

Lane 4: Jurkat whole cell lysate (ab7899) at 20 µg with Human

Nucleolin peptide (ab25315) at 1 µg/ml

Lane 5: A-431 whole cell lysate (ab7909) at 20 µg with Human

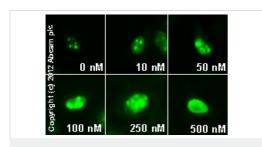
Nucleolin peptide (ab25315) at 1 µg/ml

# **Secondary**

Lanes 2-5: Goat polyclonal to Rabbit lgG H&L (HRP) Pre-Adsorbed at 1/10000 dilution

Performed under reducing conditions.

**Predicted band size:** 76 kDa **Observed band size:** 100 kDa



Immunocytochemistry/ Immunofluorescence - Anti-Nucleolin antibody (ab22758) ab22758 staining nucleolin in HeLa cells treated with Triptolide from *Tripterygium wilfordii* (ab120720), by ICC/IF. Changes in nuclear localization of nucleolin (from nucleous to whole nucleous) correlates with increased concentration of Triptolide from *Tripterygium wilfordii*, as described in literature.

The cells were incubated at  $37^{\circ}\text{C}$  for 1h in media containing different concentrations of  $\underline{ab120720}$  (Triptolide from *Tripterygium wilfordii*) in DMSO, fixed with 4% formaldehyde for 10 minutes at room temperature and blocked with PBS containing 10% goat serum, 0.3 M glycine, 1% BSA and 0.1% tween for 2h at room temperature. Staining of the treated cells with ab22758 (1  $\mu$ g/ml) was performed overnight at  $4^{\circ}\text{C}$  in PBS containing 1% BSA and 0.1% tween. A DyLight 488 goat anti-rabbit polyclonal antibody (ab96899) at 1/250 dilution was used as the secondary antibody.

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

#### Our Abpromise to you: Quality guaranteed and expert technical support

- · Replacement or refund for products not performing as stated on the datasheet
- · Valid for 12 months from date of delivery

- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.co.jp/abpromise">https://www.abcam.co.jp/abpromise</a> or contact our technical team.

### Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors