# abcam

# Product datasheet

# Anti-NUP98 antibody [2H10] - Nuclear Pore Marker ab50610

★★★★★ <u>5 Abreviews</u> <u>25 References</u> 5 图像

概述

产品名称 Anti-NUP98抗体[2H10] -核Pore Marker

**描述** 大鼠单克隆抗体[2H10] to NUP98 -核Pore Marker

**宿主** Rat

经测试应用 适用于: WB, ICC/IF

种属反应性 与反应: Mouse, Rat, Human, African green monkey

免疫原 Recombinant fragment corresponding to Human NUP98 aa 1-466.

阳性对照 WB: HeLa nuclear lysate. Jurkat, HeLa, COS-7, NIH/3T3 and SH-SY5Y cell lysate. ICC/IF: HeLa

and NIH/3T3 cells.

常规说明 This product was changed from ascites to tissue culture supernatant on 17 May 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.

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

性能

形式 Liquid

**存放说明** 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.

**存储溶液** pH: 7.40

Preservative: 0.097% Sodium azide

Constituent: 0.0268% PBS

纯**度** Tissue culture supernatant

纯**化**说明 Purified from TCS.

**克隆** 单克隆

1

 克隆编号
 2H10

 骨髓瘤
 Sp2

 同种型
 lgG2c

 轻链类型
 kappa

#### 应用

# The Abpromise quarantee Abpromise™承诺保证使用ab50610于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应 <b>用</b>	Ab评论	说明
WB	<b>★★★★</b> <u>(2)</u>	1/1000. Detects a band of approximately 98 kDa.
ICC/IF	<b>★★★★☆ (1)</b>	Use at an assay dependent concentration.  Customers have reported that Paraformaldehyde/Triton x-100 fixation provides better results, with sharp, regularly punctuate perinuclear signals. In MetOH fixed cells, the signal intensity can be somehwat lower and fuzzier and that single nucleoporin dots can be harder to distinguish around nuclear chromatin. Please see images below.

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<b>\$</b> 10	471

功能 Nup98 and Nup96 play a role in the bidirectional transport across the nucleoporin complex (NPC).

The repeat domain in Nup98 has a direct role in the transport.

疾病相关 Note=A chromosomal aberration involving NUP98 is found in a form of acute myeloid leukemia.

 $\label{eq:total_continuity} Translocation t(7;11)(p15;p15) with HOXA9. Translocation t(11;17)(p15;p13) with PHF23. \\ Note=A chromosomal aberration involving NUP98 is found in childhood acute myeloid leukemia. \\ Translocation t(5;11)(q35;p15.5) with NSD1. Translocation t(8;11)(p11.2;p15) with WHSC1L1. \\ Translocation t(5;11)(q35;p15.5) with NSD1. Translocation t(8;11)(p11.2;p15) with WHSC1L1. \\ Translocation t(5;11)(q35;p15.5) with NSD1. Translocation t(8;11)(p11.2;p15) with WHSC1L1. \\ Translocation t(5;11)(q35;p15.5) with NSD1. Translocation t(8;11)(p11.2;p15) with WHSC1L1. \\ Translocation t(5;11)(q35;p15.5) with NSD1. Translocation t(8;11)(p11.2;p15) with WHSC1L1. \\ Translocation t(8;11)(p11.2;p15) with NSD1. \\ Translocation t(8;11)(p11.2;p15) with WHSC1L1. \\$ 

Note=A chromosomal aberration involving NUP98 is found in a form of therapy-related

myelodysplastic syndrome. Translocation t(11;20)(p15;q11) with TOP1.

Note=A chromosomal aberration involving NUP98 is found in a form of T-cell acute lymphoblastic

leukemia (T-ALL). Translocation t(3;11)(g12.2;p15.4) with LNP1.

Note=A chromosomal aberration involving NUP98 is associated with pediatric acute myeloid leukemia (AML) with intermediate characteristics between M2-M3 French-American-British (FAB) subtypes. Translocation t(9;11)(p22;p15) with PSIP1/LEDGF. The chimeric transcript is an

in-frame fusion of NUP98 exon 8 to PSIP1/LEDGF exon 4.

序列相似性 Belongs to the nucleoporin GLFG family.

Contains 1 peptidase S59 domain.

结**构域** Contains G-L-F-G repeats.

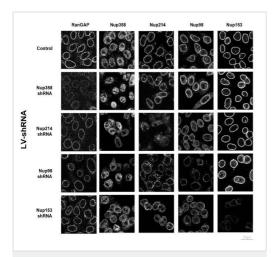
翻译后修饰 Isoform 1 to isoform 4 are autoproteolytically cleaved to yield Nup98 and Nup96 or Nup98 only,

respectively. Cleaved Nup98 is necessary for the targeting of Nup98 to the nuclear pore and the

interaction with Nup96.

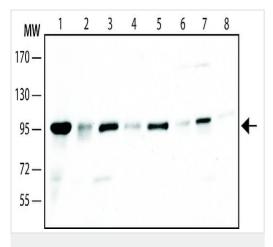
细胞定位 Nucleus > nuclear pore complex. Nucleus membrane. Nup96 is localized to the nucleoplasmic

side of the nuclear pore complex, at or near the nucleoplasmic basket.



Immunocytochemistry/ Immunofluorescence - Anti-NUP98 antibody [2H10] - Nuclear Pore Marker (ab50610)

Di Nunzio et al PLoS One. 2012;7(9):e46037. doi: 10.1371/journal.pone.0046037. Epub 2012 Sep 25. Fig 1. Reproduced under the Creative Commons license http://creativecommons.org/licenses/by/4.0/



Western blot - Anti-NUP98 antibody [2H10] - Nuclear Pore Marker (ab50610)

Lentiviral vector-encoded shRNAs achieve efficient knockdown of human nucleoporins and have negligible cytotoxic or cytostatic effects.

HeLa cells (4×10<sup>6</sup>) were transduced with lentiviral vectors (MOI 50) encoding shRNAs specific for the indicated nucleoporins and used at 2 days p.t for Nup153 shRNA and 5 days p.t for all others.

(Panel B) Subcellular localisation of nuclear pore components upon nucleoporin knock-down was tested by confocal fluorescence microscopy of LV- (Control) and LV-shRNA transduced cells using specific anti-Nup antibodies. Images were acquired on the same day with the same conditions and are representative of two independent experiments.

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

**All lanes :** Anti-NUP98 antibody [2H10] - Nuclear Pore Marker (ab50610) at 1  $\mu$ g/ml

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

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

**Lane 3 :** Jurkat (human T cell leukemia cell line from peripheral blood) cell lysate

**Lane 4**: SH-SY5Y (human neuroblastoma cell line from bone marrow) cell lysate

**Lane 5**: COS-7 (african green monkey kidney fibroblast-like cell line) cell lysate

Lane 6: NIH/3T3 (mouse embyro fibroblast cell line) cell lysate

Lane 7 : P19 cell lysate

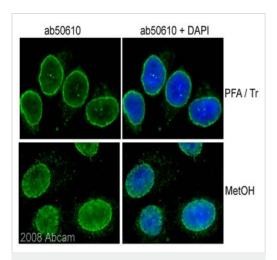
Lane 8 : NRK cell lysate

### Secondary

All lanes: Goat Anti-Mouse IgG-Peroxidase

Developed using the ECL technique.

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

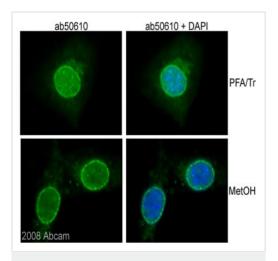


Immunocytochemistry/ Immunofluorescence - Anti-NUP98 antibody [2H10] - Nuclear Pore Marker (ab50610)

Image and protocol courtesy of Rosamaria Mangiacasale, Marilena Ciciarello and Patrizia Lavia, Univ Rome La Sapienza, Italy ab50610 (1/100) staining NUP98 in HeLa (Human epithelial cell line from cervix adenocarcinoma) cells (green).

Cells were fixed with paraformaldehyde/Triton X-100 [10 min in PTEMF buffer (20mM PIPES, 1mM MgCl $_2$ , 10mM EGTA, 4% PFA) /0.2% Triton X-100 at room temperature] or methanol (6 min in methanol -20 °C , followed by 3 washes in 1x PBS) and counterstained with DAPI in order to highlight the nucleus (blue).

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



Immunocytochemistry/ Immunofluorescence - Anti-NUP98 antibody [2H10] - Nuclear Pore Marker (ab50610)

Image and protocol courtesy of Rosamaria Mangiacasale, Marilena Ciciarello and Patrizia Lavia, Univ Rome La Sapienza, Italy ab50610 (1/100) staining NUP98 in NIH/3T3 (Mouse embryo fibroblast cell line) cells (green).

Cells were fixed with paraformaldehyde/Triton X-100 (10 min in PTEMF buffer (20mM PIPES, 1mM MgCl $_2$ , 10mM EGTA, 4% PFA) /0.2% Triton X-100 at room temperature) or methanol (6 min in methanol -20 °C , followed by 3 washes in 1x PBS) and counterstained with DAPI in order to highlight the nucleus (blue).

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Immunocytochemistry/ Immunofluorescence - Anti-NUP98 antibody [2H10] - Nuclear Pore Marker (ab50610)

This image is courtesy of an anonymous Abreview.

Paraformaldehyde-fixed, 0.5% Triton X-100 permeabilized HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) cells stained for NUP98 (green) using ab50610 at 1/200 dilution in ICC/IF, followed by Donkey Anti-Rat Alexa Fluor<sup>®</sup> 488.

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

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