abcam

Product datasheet

Anti-NUP98 antibody [EPR6678] - Nuclear Pore Marker ab124980

Recombinant RabMAb

★★★★★ 1 Abreviews 1 References 4 Images

Overview

Product name Anti-NUP98 antibody [EPR6678] - Nuclear Pore Marker

Description Rabbit monoclonal [EPR6678] to NUP98 - Nuclear Pore Marker

Host species Rabbit

Specificity ab124980 recognises Nuclear pore complex protein Nup96 of Nuclear pore complex protein

Nup98-Nup96.

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 NUP98 aa 1600-1700. The exact sequence is proprietary. The

immunogen sequence is within Nuclear pore complex protein Nup96 of the Nuclear pore complex

protein Nup98-Nup96.

Database link: **P52948**

Positive control HeLa, SH-SY5Y, and Caco-2 cell lysates and Human colon tissue.

General notesThis 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**.

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.

1

Storage buffer pH: 7.2

Preservative: 0.01% Sodium azide

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

supernatant

Purity Protein A purified

Purification notesNot purified; provided in cell supernatant and storage buffer.

ClonalityMonoclonalClone numberEPR6678

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab124980 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. Predicted molecular weight: 188 kDa.
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Antigen retrieval is recommended.
ICC/IF		1/50 - 1/100.

Application notes Is unsuitable for Flow Cyt or IP.

Target

Function 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.

Involvement in diseaseNote=A chromosomal aberration involving NUP98 is found in a form of acute myeloid leukemia.

 $Translocation\ t (7;11) (p15;p15)\ with\ HOXA9.\ Translocation\ t (11;17) (p15;p13)\ with\ PHF23.$

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.

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

 $myelody splastic\ syndrome.\ Translocation\ t (11;20) (p15;q11)\ with\ TOP1.$

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

leukemia (T-ALL). Translocation t(3;11)(q12.2;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.

Sequence similaritiesBelongs to the nucleoporin GLFG family.

Contains 1 peptidase S59 domain.

Domain Contains G-L-F-G repeats.

Post-translational Isoform 1 to isoform 4 are autoproteolytically cleaved to yield Nup98 and Nup96 or Nup98 only,

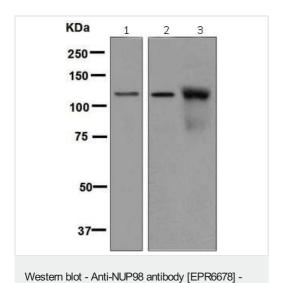
modifications

respectively. Cleaved Nup98 is necessary for the targeting of Nup98 to the nuclear pore and the interaction with Nup96.

Cellular localization

Nucleus > nuclear pore complex. Nucleus membrane. Nup96 is localized to the nucleoplasmic side of the nuclear pore complex, at or near the nucleoplasmic basket.

Images



Nuclear Pore Marker (ab124980)

All lanes : Anti-NUP98 antibody [EPR6678] - Nuclear Pore Marker (ab124980) at 1/1000 dilution

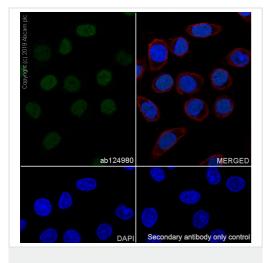
Lane 1 : HeLa cell lysate

Lane 2 : SH-SY5Y cell lysate

Lane 3 : Caco-2 cell lysate

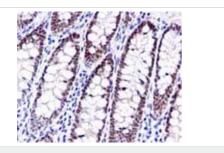
Lysates/proteins at 10 μg per lane.

Predicted band size: 188 kDa



Immunocytochemistry/ Immunofluorescence - Anti-NUP98 antibody [EPR6678] - Nuclear Pore Marker (ab124980) ab124980 staining NUP98 in SH-SY5Y, human neuroblastoma epithelial cells by ICC/IF

(Immunocytochemistry/immunofluorescence). Cells were fixed with 4% Paraformaldehyde, permeabilized with 0.1% Triton X-100. Samples were incubated with primary antibody (1/500). Ab150077, an Alexa Fluor® 594-conjugated Goat anti rabbit (1:1000) (ab150077) was used as the secondary antibody. Counterstained with ab195889, an Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (1/100). Nuclear counterstained with DAPI.

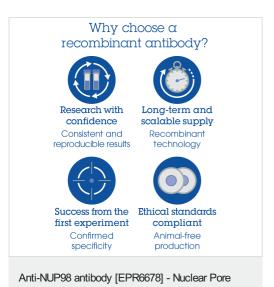


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-NUP98 antibody

[EPR6678] - Nuclear Pore Marker (ab124980)

ab124980, at 1/50 to 1/100, staining NUP98 in Human colon tissue by immunohistochemistry [Paraffin Embedded Tissues (IHC-P)].

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



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 https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

Marker (ab124980)

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