abcam

Product datasheet

Anti-NUP98 antibody [EPR6678] - BSA and Azide free ab226102

Recombinant RabMAb

4 Images

Overview

Product name Anti-NUP98 antibody [EPR6678] - BSA and Azide free

Description Rabbit monoclonal [EPR6678] to NUP98 - BSA and Azide free

Host species Rabbit

Specificity This antibody recognises Nuclear pore complex protein Nup96 of Nuclear pore complex protein

Nup98-Nup96.

Tested applications Suitable for: ICC/IF, WB, IHC-P

Unsuitable for: Flow Cyt or IP

Species reactivity Reacts with: Human

Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. **Immunogen**

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

General notes ab226102 is the carrier-free version of ab124980.

> Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

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**.

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 +4°C. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

ClonalityMonoclonalClone numberEPR6678

Isotype IgG

Applications

The Abpromise guarantee

Our Abpromise guarantee covers the use of ab226102 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		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 188 kDa.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Antigen retrieval is recommended.

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.

Translocation (6, 11)(q55, p15.5) with W165

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)(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 similarities Belongs 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

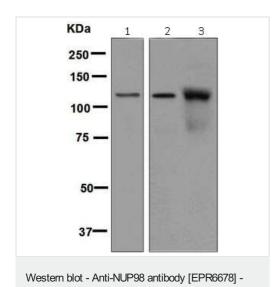
respectively. Cleaved Nup98 is necessary for the targeting of Nup98 to the nuclear pore and the

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



BSA and Azide free (ab226102)

All lanes: Anti-NUP98 antibody [EPR6678] - Nuclear Pore Marker

(ab124980) at 1/1000 dilution

Lane 1: HeLa cell lysate

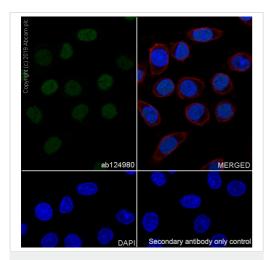
Lane 2: SH-SY5Y cell lysate

Lane 3: Caco-2 cell lysate

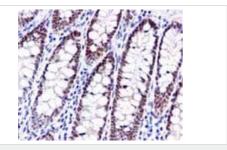
Lysates/proteins at 10 µg per lane.

Predicted band size: 188 kDa

This data was developed using ab124980, the same antibody clone in a different buffer formulation.



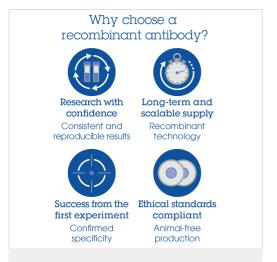
Immunocytochemistry/ Immunofluorescence - Anti-NUP98 antibody [EPR6678] - BSA and Azide free (ab226102) This data was developed using <u>ab124980</u>, the same antibody clone in a different buffer formulation.<u>ab124980</u> staining NUP98 in SH-SY5Y, human neuroblastoma epithelial cells by ICC/IF (Immunocytochemistry/immunofluorescence). 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) (<u>ab150077</u>) was used as the secondary antibody. Counterstained with <u>ab195889</u>, 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] - BSA and Azide free (ab226102)

This data was developed using <u>ab124980</u>, the same antibody clone in a different buffer formulation.<u>ab124980</u>, 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.



Anti-NUP98 antibody [EPR6678] - BSA and Azide

free (ab226102)

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

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