




Product datasheet

Anti-NUP98 antibody [13C2] - BSA and Azide free ab179894

1 References 8 Images

Overview

Product name	Anti-NUP98 antibody [13C2] - BSA and Azide free
Description	Mouse monoclonal [13C2] to NUP98 - BSA and Azide free
Host species	Mouse
Tested applications	Suitable for: WB, ICC/IF
Species reactivity	Reacts with: Human, Saccharomyces cerevisiae, Tetrahymena, Schizosaccharomyces pombe
Immunogen	<p>This product was produced with the following immunogens:</p> <p>Synthetic peptide corresponding to Tetrahymena sp. NUP98 aa 1-29 (N terminal). Sequence: MFGNTGGGGLFGNTQTQQTGGGLFGQPQQ</p> <p>Database link: D3KYQ3</p> <p>Synthetic peptide corresponding to Tetrahymena sp. NUP98 aa 646-664 (internal sequence). Sequence: SNPTQGGGLFGAANPGLGG Database link: D3KYQ3</p> <p>    </p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	Constituents: 50% Glycerol, 50% PBS
Purity	Protein G purified
Clonality	Monoclonal
Clone number	13C2
Isotype	IgG1
Light chain type	kappa

Applications

Our [Abpromise guarantee](#) covers the use of **ab179894** 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		Use a concentration of 0.4 µg/ml. Predicted molecular weight: 112 kDa.
ICC/IF		Use a concentration of 0.5 µg/ml.

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 disease

Note=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 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.

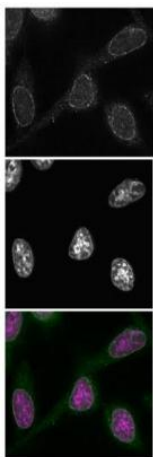
Post-translational modifications

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.

Cellular localization

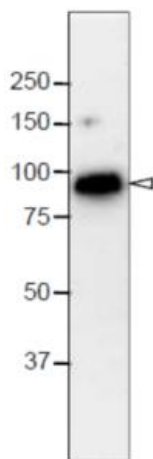
Nucleus > nuclear pore complex. Nucleus membrane. Nup96 is localized to the nucleoplasmic side of the nuclear pore complex, at or near the nucleoplasmic basket.

Images



Immunocytochemistry/ Immunofluorescence - Anti-NUP98 antibody [13C2] - BSA and Azide free (ab179894)

Immunofluorescent analysis of HeLa cells labeling NUP98 with ab179894 at 0.5 $\mu\text{g/ml}$ in PBS (top panel). DAPI staining (middle panel). 4 $\mu\text{g/ml}$ of Alexa488-labeled anti-mouse IgG was used as secondary antibody. The color image represents merged images of ab179894 (green) with DAPI (magenta).



Western blot - Anti-NUP98 antibody [13C2] - BSA and Azide free (ab179894)

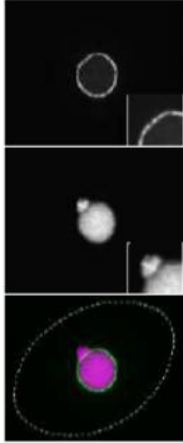
Anti-NUP98 antibody [13C2] - BSA and Azide free (ab179894) at 0.4 $\mu\text{g/ml}$ + HeLa cell extract

Secondary

HRP-labeled anti-mouse IgG at 0.4 $\mu\text{g/ml}$

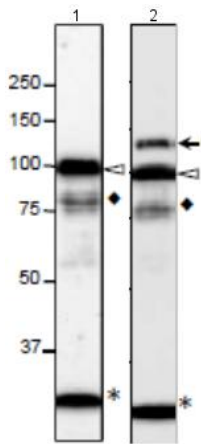
Developed using the ECL technique.

Predicted band size: 112 kDa



Immunocytochemistry/ Immunofluorescence - Anti-NUP98 antibody [13C2] - BSA and Azide free (ab179894)

Immunofluorescent analysis of *Tetrahymena thermophila* cells labeling NUP98 with ab179894 at 0.5 µg/ml (top panel). DAPI (middle panel). The color image represents merged images of ab179894 (green) with DAPI (magenta). 4 µg/ml of Alexa488-labelled anti-mouse IgG was used as secondary antibody. Dotted lines represent the outlines of cells. The insert is a magnified image showing the position of the micronucleus.



Western blot - Anti-NUP98 antibody [13C2] - BSA and Azide free (ab179894)

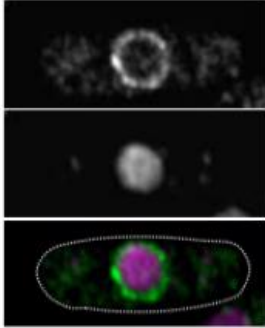
All lanes : Anti-NUP98 antibody [13C2] - BSA and Azide free (ab179894)

Lane 1 : *Tetrahymena thermophila* wild type cell extract

Lane 2 : *Tetrahymena thermophila* cell extract ectopically-expressing GFP-MacNup98A (in addition to endogenous MacNup98A)

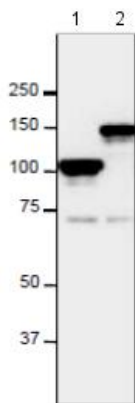
Predicted band size: 112 kDa

Open arrowheads represent the positions of MacNup98A. The 125-kDa band corresponds to GFP-MacNup98A. Diamonds and asterisks represent uncharacterized proteins.



Immunocytochemistry/ Immunofluorescence - Anti-NUP98 antibody [13C2] - BSA and Azide free (ab179894)

Immunofluorescent analysis of *S. pombe* cells labeling NUP98 with ab179894 (top panel). DAPI (middle panel). The color image represents merged images of ab179894 (green) with DAPI (magenta). Dotted lines represent the outlines of cells.



Western blot - Anti-NUP98 antibody [13C2] - BSA and Azide free (ab179894)

All lanes : Anti-NUP98 antibody [13C2] - BSA and Azide free (ab179894)

Lane 1 : *S. pombe* cell extract

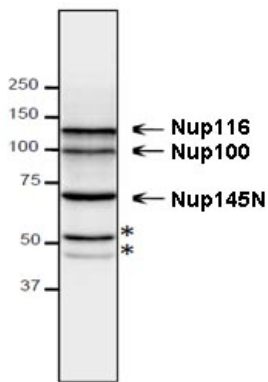
Lane 2 : NUP98-GFP-expressing *S. pombe* cell extract

Predicted band size: 112 kDa



Immunocytochemistry/ Immunofluorescence - Anti-NUP98 antibody [13C2] - BSA and Azide free (ab179894)

Immunofluorescent analysis of *S. cerevisiae* cells labeling NUP98 with ab179894 at 1/100 dilution (top panel). DAPI (middle panel). The color image represents a merged image of ab179894 (green) with DAPI (magenta). Dotted lines represent the outlines of cells.



Western blot - Anti-NUP98 antibody [13C2] - BSA and Azide free (ab179894)

Supernatant of hybridoma culture medium of ab179894 at 1/10 dilution + *S. cerevisiae* cell extract

Predicted band size: 112 kDa

ab179894 crossreacts with multiple nucleoporins of *S. cerevisiae*.

Asterisks represent uncharacterized proteins.

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