10320 Camino Santa Fe, Suite G
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NCLN Antibody
Catalog # ASC11465

Specification

NCLN Antibody - Product Information

Application	**WB, IHC, IF**
Primary Accession	Q969V3
Other Accession	NP_064555, 51873031
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Application Notes	**NCLN antibody can be used for detection of NCLN by Western blot at 0.5 µg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 µg/mL. For immunofluorescence start at 2.5 µg/mL.**

NCLN Antibody - Additional Information

Gene ID	**56926**

Target/Specificity
NCLN;

Reconstitution & Storage
NCLN antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions
NCLN Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

NCLN Antibody - Protein Information

Name NCLN {ECO:0000303|PubMed:36261522, ECO:0000312|HGNC:HGNC:26923}

Function
Component of the multi-pass translocon (MPT) complex that mediates insertion of multi-pass membrane proteins into the lipid bilayer of membranes (PubMed:36261522, PubMed:32820719). The MPT complex takes over after the SEC61 complex: following membrane insertion of the first few transmembrane segments of proteins by the SEC61 complex, the MPT complex occludes the lateral gate of the SEC61 complex to promote insertion of subsequent transmembrane regions (PubMed:36261522). May antagonize Nodal signaling and subsequent organization of axial structures during mesodermal patterning, via its interaction with NOMO (By similarity).

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Cellular Location
Endoplasmic reticulum membrane; Single-pass membrane protein

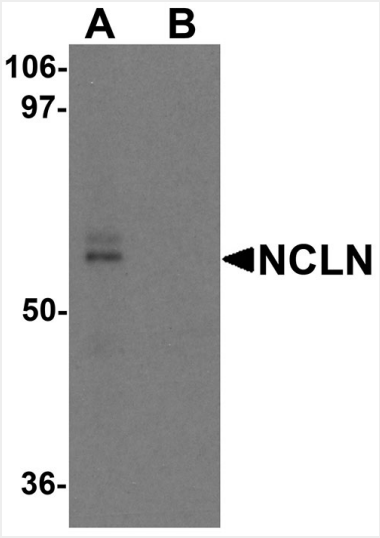
Tissue Location
Highly expressed in pancreas and skeletal muscle and, at lower levels, in heart.

NCLN Antibody - Protocols

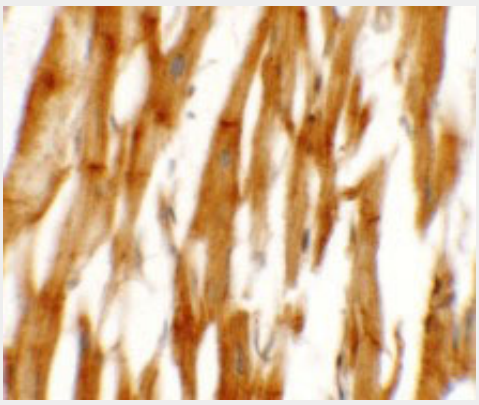
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

NCLN Antibody - Images

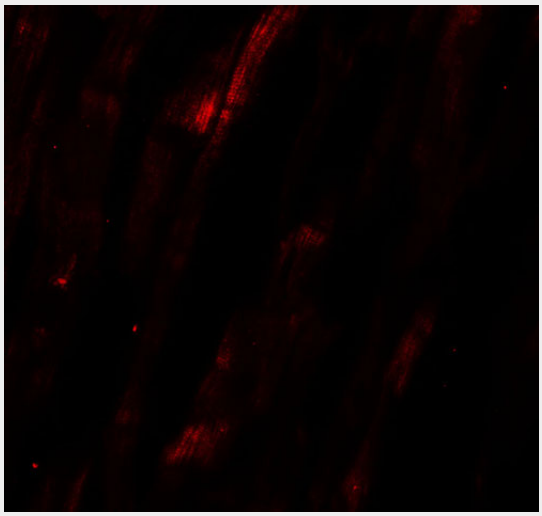


Western blot analysis of NCLN in mouse heart tissue lysate with NCLN antibody at 0.5 µg/mL in (A) the absence and (B) the presence of blocking peptide.



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Immunohistochemistry of NCLN in human heart tissue with NCLN antibody at 2.5 µg/mL.



Immunofluorescence of NCLN in human heart tissue with NCLN antibody at 20 µg/mL.

NCLN Antibody - Background

NCLN Antibody: Nicalin, along with its binding partner Nomo, is a novel signaling antagonist to Nodals, signaling factors of the TGF-β superfamily that play a key role in vertebrate development. Nicalin is distantly related to Nicastrin, a component of the Alzheimer's disease-associated gamma-secretase, and is thought to have a similar function. Another protein, TMEM147, has also been recently identified as associating with Nicalin and NOMO as part of the gamma-secretase-like complex.

NCLN Antibody - References

Haffner C, Frauli M, Topp S, et al. Nicalin and its binding partner Nomo are novel Nodal signaling antagonists. EMBO J. 2004; 23:3041-50.
Dettmer U, Kuhn PH, Abou-Ajram C, et al. Transmembrane protein 147 (TMEM147) is a novel component of the Nicalin-NOMO protein complex. J. Biol. Chem. 2010; 285:26174-81.