

For Research Use Only

# N-cadherin Monoclonal antibody

Catalog Number: 66219-1-Ig

Featured Product

152 Publications



## Basic Information

<b>Catalog Number:</b> 66219-1-Ig	<b>GenBank Accession Number:</b> BC036470	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 150ul, Concentration: 2000 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 1000	<b>CloneNo.:</b> 1D8B3
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P19022	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:7500-1:30000 IF 1:50-1:500
<b>Isotype:</b> IgG1	<b>Full Name:</b> cadherin 2, type 1, N-cadherin (neuronal)	
<b>Immunogen Catalog Number:</b> AG4996	<b>Calculated MW:</b> 906 aa, 100 kDa	
	<b>Observed MW:</b> 130 kDa	

## Applications

### Tested Applications:

WB, IF, IHC, ELISA

### Cited Applications:

WB, IF, IHC

### Species Specificity:

human, pig, mouse, rat, rabbit

### Cited Species:

human, rat, mouse, pig

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

**WB:** rabbit brain tissue, pig brain tissue, human heart tissue, MKN-45 cells, HEK-293 cells, PC-3 cells, mouse brain tissue, rat brain tissue, C2C12 cells, C6 cells, Saos-2 cells, SGC-7901 cells, ROS1728 cells, NIH/3T3 cells

**IHC:** mouse heart tissue, mouse brain tissue, human malignant melanoma tissue, human ovary tumor tissue, rat heart tissue

**IF:** mouse heart tissue,

## Background Information

Cadherins are a family of transmembrane glycoproteins that mediate calcium-dependent cell-cell adhesion and play an important role in the maintenance of normal tissue architecture. N-cadherin (neural cadherin), also known as CDH2 (cadherin 2), is a 130-kDa transmembrane protein and a classical member of the cadherin superfamily which also include E-, P-, R-, and B-cadherins. Expression of N-cadherin has been reported on various cell types including neurons, endothelial cells and cardiac myocytes (PMID: 11282032; 9508779; 8125202). N-cadherin has functions in early brain morphogenesis, synaptogenesis and synaptic plasticity (PMID: 23321619). The N-cadherin ectodomain can be cleaved, leading to the generation of a 90 kD N-terminal fragment (PMID: 16998833; 17028923).

## Notable Publications

Author	Pubmed ID	Journal	Application
Xia Peng	36247281	Am J Transl Res	WB
Wenjing Guo	33117682	Front Oncol	WB
Jian Zhang	27645581	Sci Rep	IF

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

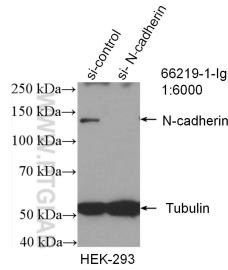
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

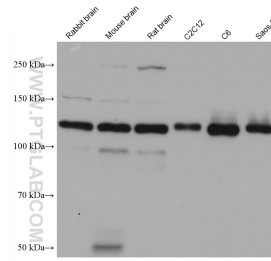
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

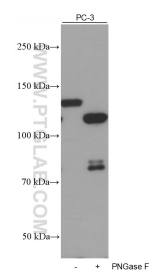
## Selected Validation Data



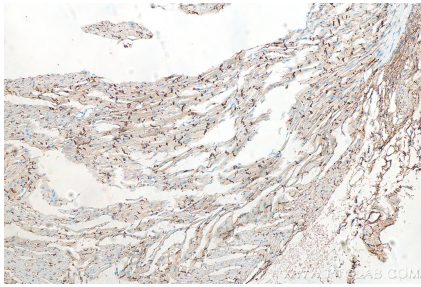
WB result of N-cadherin antibody (66219-1-Ig; 1:6000; incubated at room temperature for 1.5 hours) with sh-Control and sh-N-cadherin transfected HEK-293 cells.



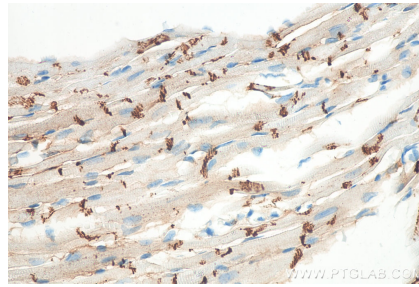
Various lysates were subjected to SDS PAGE followed by western blot with 66219-1-Ig (N-cadherin antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



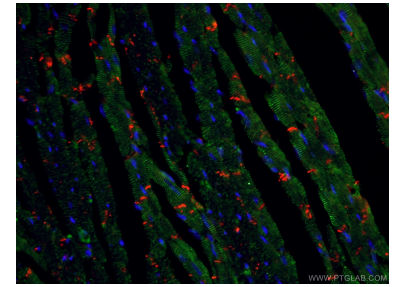
Untreated and PNGase F-treated lysates of PC-3 cells were subjected to SDS PAGE followed by western blot with 66219-1-Ig (N-cadherin antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. PNGase F was obtained from Atagenix (cat.NO. ata808).



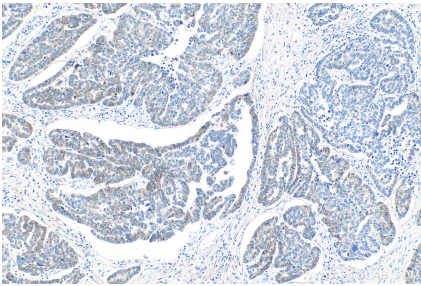
Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 66219-1-Ig (N-cadherin antibody) at dilution of 1:15000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



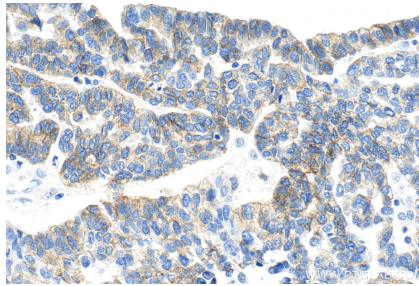
Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 66219-1-Ig (N-cadherin antibody) at dilution of 1:15000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using 66219-1-Ig (N-cadherin antibody) at dilution of 1:100 and Coralite594-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). The section was co-stained with 11313-2-AP (alpha Actinin) in green.



Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 66219-1-Ig (N-cadherin antibody) at dilution of 1:5000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 66219-1-Ig (N-cadherin antibody) at dilution of 1:5000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).