

For Research Use Only

N-cadherin Monoclonal antibody

Catalog Number: 66219-1-Ig

Featured Product

207 Publications



Basic Information

Catalog Number:

66219-1-Ig

Size:

150ul, Concentration: 2000 ug/ml by Nanodrop;

Source:

Mouse

Isotype:

IgG1

Immunogen Catalog Number:

AG4996

GenBank Accession Number:

BC036470

GeneID (NCBI):

1000

UNIPROT ID:

P19022

Full Name:

cadherin 2, type 1, N-cadherin (neuronal)

Calculated MW:

906 aa, 100 kDa

Observed MW:

130 kDa

Purification Method:

Protein G purification

CloneNo.:

1D8B3

Recommended Dilutions:

WB: 1:5000-1:50000

IHC: 1:7500-1:30000

IF-P: 1:200-1:800

Applications

Tested Applications:

WB, IHC, IF-P, ELISA

Cited Applications:

WB, IHC, IF

Species Specificity:

human, mouse, rat, pig, rabbit

Cited Species:

human, mouse, rat, pig, monkey

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-P: 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, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

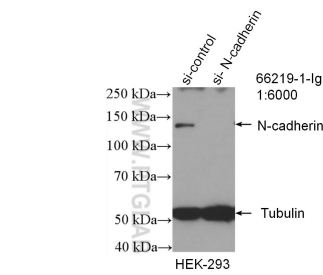
For technical support and original validation data for this product please contact:

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

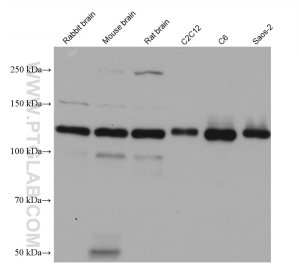
E: proteintech@ptglab.com
W: ptglab.com

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

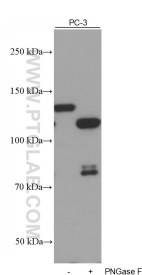
Selected Validation Data



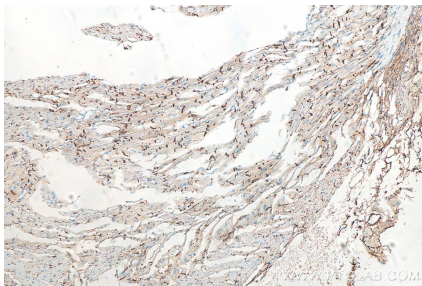
WB result of N-cadherin antibody (66219-1-Ig; 1:6000; incubated at room temperature for 1.5 hours) with sh-Control and sh-N-cadherin transfected HEK-293 cells.



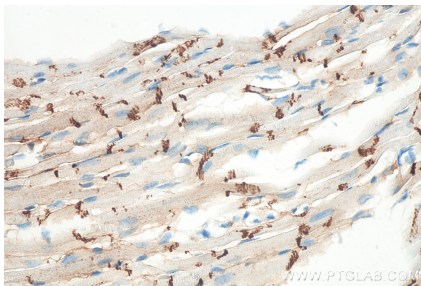
Various lysates were subjected to SDS PAGE followed by western blot with 66219-1-Ig (N-cadherin antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



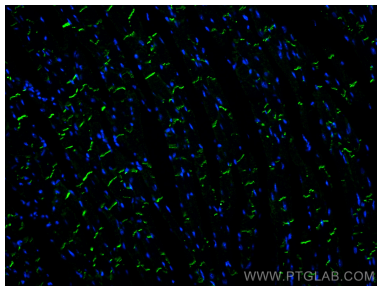
Untreated and PNGase F-treated lysates of PC-3 cells were subjected to SDS PAGE followed by western blot with 66219-1-Ig (N-cadherin antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. PNGase F was obtained from Atagenix (cat.NO. ata808).



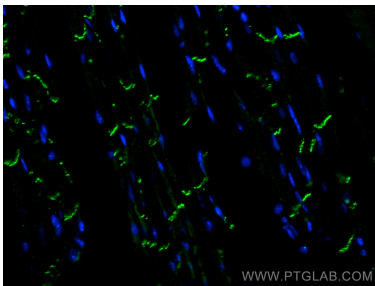
Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 66219-1-Ig (N-cadherin antibody) at dilution of 1:15000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



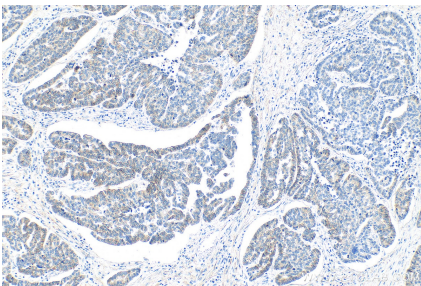
Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 66219-1-Ig (N-cadherin antibody) at dilution of 1:15000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



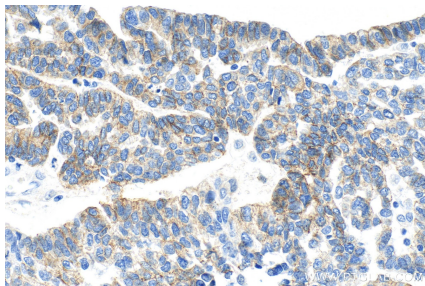
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse heart tissue using N-cadherin antibody (66219-1-Ig, Clone: 1D8B3) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



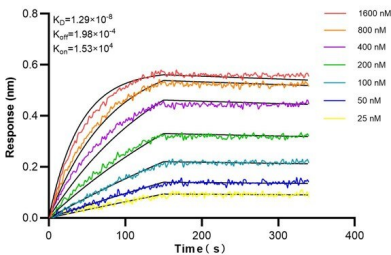
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse heart tissue using N-cadherin antibody (66219-1-Ig, Clone: 1D8B3) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 66219-1-Ig (N-cadherin antibody) at dilution of 1:5000 (under 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).



Biolayer interferometry (BLI) kinetic assays of 66219-1-PBS against Human N-cadherin were performed. The affinity constant is 12.9 nM.