

## N-cadherin Polyclonal antibody

Catalog Number: 22018-1-AP

Featured Product

1437 Publications

## Basic Information

## Catalog Number:

22018-1-AP

## Concentration:

650 ug/ml

## Source:

Rabbit

## Isotype:

IgG

## Immunogen Catalog Number:

AG16792

## 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:

Antigen affinity purification

## Recommended Dilutions:

WB: 1:2000-1:16000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:2000-1:8000

IF-P: 1:50-1:500

IF-Fro: 1:200-1:800

IF/ICC: 1:200-1:800

## Applications

## Tested Applications:

WB, IHC, IF/ICC, IF-P, IF-Fro, IP, ELISA

## Cited Applications:

WB, IHC, IF, CoIP

## Species Specificity:

human, mouse, rat

## Cited Species:

human, mouse, rat, canine, bovine, hamster, horse, gecko

**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: mouse brain tissue, A549 cells, C2C12 cells, HEK-293 cells, rat brain tissue, HepG2 cells, NCI-H1299 cells, HeLa cells, C6 cells, PC-3 cells, rat heart tissue

IP: mouse brain tissue,

IHC: mouse heart tissue, mouse brain tissue

IF-P: mouse heart tissue, C2C12 cells

IF-Fro: mouse heart tissue,

IF/ICC: C2C12 cells,

## 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 glycoprotein 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
Ji Xing	36230734	Cancers (Basel)	WB
Federico Armando	34638929	Int J Mol Sci	IHC
Jie Lian	33123271	J Cancer	WB

## 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

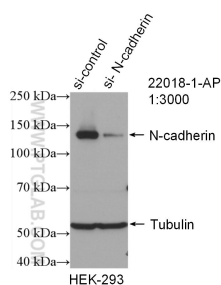
For technical support and original validation data for this product please contact:

T: 4006900926

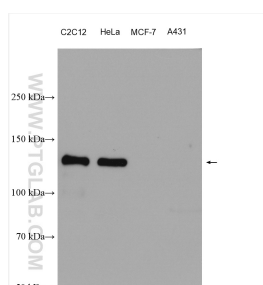
E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)W: [ptgcn.com](http://ptgcn.com)

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

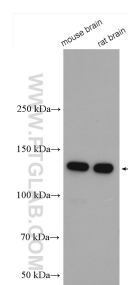
## Selected Validation Data



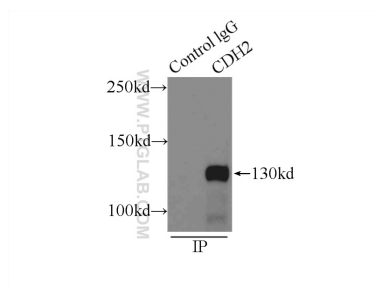
WB result of N-cadherin antibody (22018-1-AP; 1:3000; incubated at room temperature for 1.5 hours) with sh-Control and sh-N-cadherin transfected HEK-293 cells.



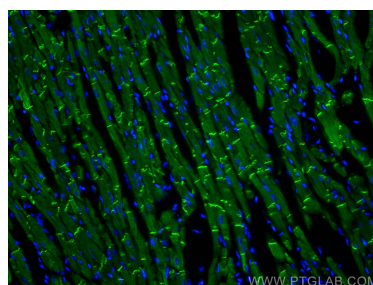
C2C12 (N-cadherin+), HeLa (N-cadherin+), MCF-7 (N-cadherin-), A431 (N-cadherin-) cell lysates were subjected to SDS PAGE followed by western blot with 22018-1-AP (N-cadherin antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



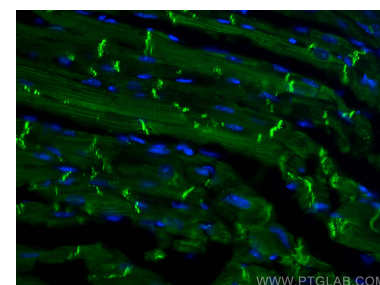
Various lysates were subjected to SDS PAGE followed by western blot with 22018-1-AP (N-cadherin antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



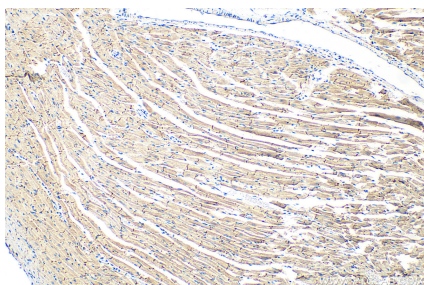
IP result of anti-N-cadherin (IP:22018-1-AP, 3ug; Detection:22018-1-AP 1:1500) with mouse brain tissue lysate 7000ug.



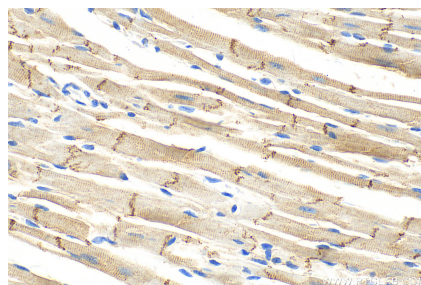
Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using N-cadherin antibody (22018-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



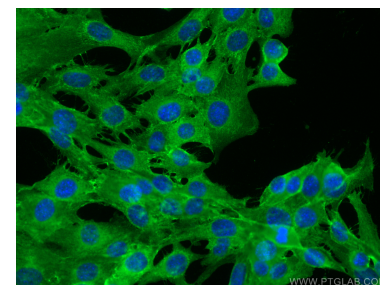
Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using N-cadherin antibody (22018-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



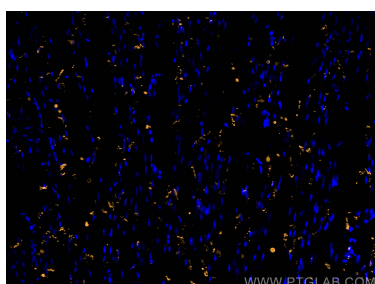
Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 22018-1-AP (N-cadherin antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 22018-1-AP (N-cadherin antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Methanol) fixed C2C12 cells using N-cadherin antibody (22018-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded mouse heart tissue using 22018-1-AP (N-cadherin antibody) at dilution of 1:400 and Cy3-conjugated Affinipure Goat Anti-Rabbit IgG(H+L).