## For Research Use Only

## N-cadherin Monoclonal antibody

Catalog Number: 68532-1-Ig



**Basic Information** 

Catalog Number: 68532-1-lg Size:

1000 µg/ml Source: Mouse Isotype:

lgG2b

Full Name: cadherin 2, type 1, N-cadherin (neuronal)

> 100 kDa Observed MW: 130 kDa

Calculated MW:

NM\_001792.4

GeneID (NCBI):

**UNIPROT ID:** 

P19022-1

1000

GenBank Accession Number:

**Purification Method:** 

Protein A purification

CloneNo.: 2G7C2

**Recommended Dilutions:** 

WB 1:5000-1:50000 IHC 1:200-1:800 IF 1:200-1:800

**Applications** 

**Tested Applications:** IF-P, IHC, WB, ELISA

Species Specificity:

Human, Pig, Mouse, Rat, Rabbit

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: pig heart tissue, hTERT-RPE1 cells, rabbit heart tissue, rat heart tissue, mouse heart tissue

IHC: mouse 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).

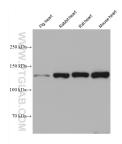
Storage

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

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

Aliquoting is unnecessary for -20°C storage

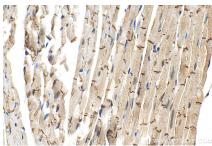
## **Selected Validation Data**



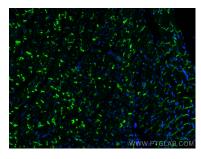
Various lysates were subjected to SDS PAGE followed by western blot with 68532-1-lg (N-cadherin antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



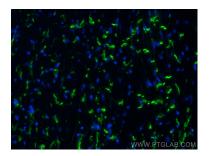
Immunohistochemical analysis of paraffinembedded mouse heart tissue slide using 68532-1-Ig (N-cadherin antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded mouse heart tissue slide using 68532-1-Ig (N-cadherin antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using N-cadherin antibody (68532-1-1g, Clone: 2G7C2) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using N-cadherin antibody (68532-1-lg, Clone: 2G7C2) at dilution of 1:400 and CoraLite®488-Conjugated Affini Pure Goat Anti-Mouse IgG(H+L).