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Rabbit Anti-N-cadherin Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP52149

Product Information

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	P19022
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	99809
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human N-cadherin
Epitope Specificity	701-800/905
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cell membrane.
SIMILARITY	Contains 5 cadherin domains.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene is a classical cadherin from the cadherin superfamily. The encoded protein is a calcium dependent cell-cell adhesion glycoprotein comprised of five extracellular cadherin repeats, a transmembrane region and a highly conserved cytoplasmic tail. The protein functions during gastrulation and is required for establishment of left-right asymmetry. At certain central nervous system synapses, presynaptic to postsynaptic adhesion is mediated at least in part by this gene product.

Additional Information

Gene ID	1000
Other Names	CDHN; NCAD; CD325; CDw325; Cadherin-2; Neural cadherin; N-cadherin; CDH2
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100,IF=1:100-500,Flow-Cyt=1:100,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	CDH2
Synonyms	CDHN, NCAD
Function	Calcium-dependent cell adhesion protein; preferentially mediates homotypic cell-cell adhesion by dimerization with a CDH2 chain from another cell. Cadherins may thus contribute to the sorting of heterogeneous cell types. Acts as a regulator of neural stem cells quiescence by mediating anchorage of neural stem cells to ependymocytes in the adult subependymal zone: upon cleavage by MMP24, CDH2-mediated anchorage is affected, leading to modulate neural stem cell quiescence. Plays a role in cell-to-cell junction formation between pancreatic beta cells and neural crest stem (NCS) cells, promoting the formation of processes by NCS cells (By similarity). Required for proper neurite branching. Required for pre- and postsynaptic organization (By similarity). CDH2 may be involved in neuronal recognition mechanism. In hippocampal neurons, may regulate dendritic spine density.
Cellular Location	Cell membrane; Single-pass type I membrane protein. Cell membrane, sarcolemma {ECO:0000250|UniProtKB:P15116}. Cell junction. Cell surface {ECO:0000250|UniProtKB:P15116}. Cell junction, desmosome {ECO:0000250|UniProtKB:P15116}. Cell junction, adherens junction {ECO:0000250|UniProtKB:P15116}. Note=Colocalizes with TMEM65 at the intercalated disk in cardiomyocytes. Colocalizes with OBSCN at the intercalated disk and at sarcolemma in cardiomyocytes {ECO:0000250|UniProtKB:P15116}

Background

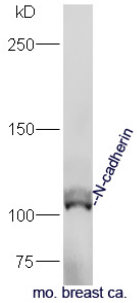
Cadherins are calcium-dependent cell adhesion proteins. They preferentially interact with themselves in a homophilic manner in connecting cells; cadherins may thus contribute to the sorting of heterogeneous cell types. CDH2 may be involved in neuronal recognition mechanism. In hippocampal neurons, may regulate dendritic spine density (By similarity).

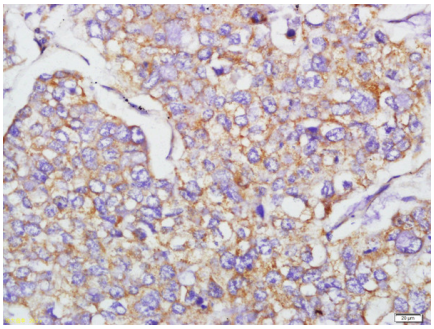
References

Reid R.A.,et al.Nucleic Acids Res. 18:5896-5896(1990).
Reid R.A.,et al.Submitted (NOV-1990) to the EMBL/GenBank/DDBJ databases.
Salomon D.,et al.J. Cell Sci. 102:7-17(1992).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.
Walsh F.S.,et al.J. Neurochem. 55:805-812(1990).

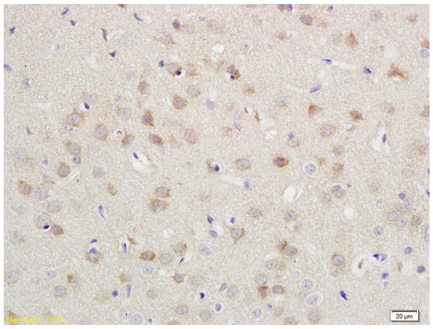
Images

Mouse breast cancer lysates probed with Anti-N-cadherin Polyclonal Antibody, Unconjugated (AP52149) at 1:300 in 4˚C. Followed by conjugation to secondary antibody at 1:5000 90min in 37˚C.

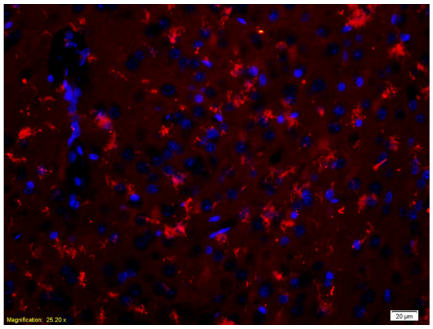




Paraformaldehyde-fixed, paraffin embedded human lung carcinoma tissue; Antigen retrieval by boiling in sodium citrate buffer(pH6) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 30 minutes; Blocking buffer (normal goat serum) at 37°C for 20min; Antibody incubation with Rabbit Anti-N-cadherin Polyclonal Antibody, Unconjugated (AP52149) at 1:400 overnight at 4°C, followed by a conjugated secondary and DAB staining



Formalin-fixed and paraffin embedded rat brain labeled with Anti-CDH2/N-cadherin Polyclonal Antibody, Unconjugated (AP52149) at 1:200 followed by conjugation to the secondary antibody and DAB staining.



Formalin-fixed and paraffin-embedded rat brain labeled with Anti-CDH2/N-cadherin Polyclonal Antibody, Unconjugated(AP52149) 1:200, overnight at 4°C, The secondary antibody was Goat Anti-Rabbit IgG, PE conjugated secondary antibody used at 1:200 dilution for 40 minutes at 37°C.

Citations

- Exosomal circPABPC1 promotes colorectal cancer liver metastases by regulating HMGA2 in the nucleus and BMP4/ADAM19 in the cytoplasm
- Antioxidation and Antiapoptosis Characteristics of Heme Oxygenase-1 Enhance Tumorigenesis of Human Prostate Carcinoma Cells
- Inhibition of ATM reverses EMT and decreases metastatic potential of cisplatin-resistant lung cancer cells through JAK/STAT3/PD-L1 pathway.
- MiR-5100 targets TOB2 to drive epithelial-mesenchymal transition associated with activating smad2/3 in lung epithelial cells.