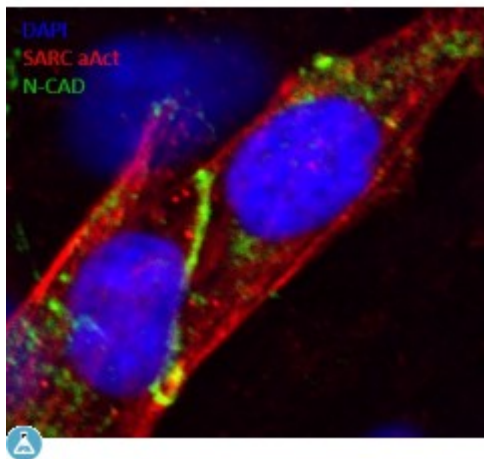


Anti-CDH2 antibody



Description

Goat polyclonal to CDH2. CDH2 is a classical member of the cadherin superfamily. This protein is a calcium dependent cell-cell adhesion glycoprotein comprised consists of 5 cadherin repeats in the extracellular domain, one trans membrane domain, and a highly conserved intracellular domain. It has been shown to play an essential role in normal neuronal development, which is implicated in an array of processes including neuronal differentiation, migration, axon growth and fasciculation.

Model

STJ140028

Host

Goat

Reactivity

Avian, Bovine, Canine, Donkey, Feline, Goat, Guinea Pig, Hamster, Horse, Human, Mouse, Other, Porcine, Rabbit, Rat, Sheep, Simian

Applications

IF, WB

Immunogen

Purified recombinant peptide derived from within residues 850 aa to C-terminus of human CDH2 produced in E. coli.

Immunogen Region

C-Term

Gene ID

[1000](#)

Gene Symbol

[CDH2](#)

Dilution range

Western blot 1:500-1:2,000 Immunofluorescence 1:25-1:250
Immunohistochemistry (paraffin) ND Immunohistochemistry (frozen) ND

Specificity

Detects endogenous levels of total N-cadherin protein by Western blot in the whole cell lysates (COS-7, HeLa, HUH and Hepa-6).

Purification

This antibody is epitope-affinity purified from goat antiserum.

Note	For research use only (RUO).
Protein Name	Cadherin-2 CDw325 Neural cadherin N-cadherin CD antigen CD325
Molecular Weight	100 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS, 20% glycerol and 0.05% sodium azide.
Concentration	2 mg/mL
Storage Instruction	Store at -20°, and avoid repeated freeze-thaw cycles.
Database Links	HGNC:17590MIM:114020
Alternative Names	Cadherin-2 CDw325 Neural cadherin N-cadherin CD antigen CD325
Function	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. 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. CDH2 may be involved in neuronal recognition mechanism. In hippocampal neurons, may regulate dendritic spine density . {ECO:0000250}.
Sequence and Domain Family	Three calcium ions are usually bound at the interface of each cadherin domain and rigidify the connections, imparting a strong curvature to the full-length ectodomain. Calcium-binding sites are occupied sequentially in the order of site 3, then site 2 and site 1 .
Cellular Localization	Cell membrane Single-pass type I membrane protein . Cell membrane, sarcolemma . Cell junction . Cell surface . Colocalizes with TMEM65 at the intercalated disk in cardiomyocytes. Colocalizes with OBSCN at the intercalated disk and at sarcolemma in cardiomyocytes. .
Post-translational Modifications	Cleaved by MMP24. Ectodomain cleavage leads to the generation of a soluble 90 kDa amino-terminal soluble fragment and a 45 kDa membrane-bound carboxy-terminal fragment 1 (CTF1), which is further cleaved by gamma-secretase into a 35 kDa. Cleavage in neural stem cells by MMP24 affects CDH2-mediated anchorage of neural stem cells to ependymocytes in the adult subependymal zone, leading to modulate neural stem cell quiescence . {ECO:0000250}.; May be phosphorylated by OBSCN. {ECO:0000250 UniProtKB:P15116}.