

Ultra-LEAF™ Purified anti-CD325 (N-Cadherin) Antibody

Catalog# / Size	844703 / 100 µg
Clone	13A9
Regulatory Status	RUO
Other Names	CDHN, CDw325, NCAD, N-cadherin 1, Cadherin 2, N-cadherin (neuronal), cadherin-2, calcium-dependent adhesion protein, neuronal, neural cadherin, Neural-cadherin
Isotype	Mouse IgG1, κ
Description	CD325 (N-cadherin) is important for neuronal migration during development, neurite outgrowth and target finding during differentiation, initial formation of synapses, and synaptic plasticity in mature neurons. CD325 (N-cadherin) is a 130 kD single pass transmembrane protein. Its extracellular region consists of five extracellular cadherin domains and has one cytoplasmic domain. N-cadherin is involved in organogenesis and in the maintenance of organ architecture by contributing to the sorting of heterogeneous cell types and in the cell adhesion needed to form tissues. N-cadherin is expressed by stem cells, myeloblasts, endothelial cells, fibroblasts, and also is expressed in neural and muscle tissues along with some types of carcinoma cells. CD325 associates with the cytoskeleton through catenin proteins.

Product Details

Verified Reactivity	Human, Mouse, Rat
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Human N-cadherin cytoplasmic domain fused to recombinant MBP.
Formulation	0.2 µm filtered in phosphate-buffered solution, pH 7.2, containing no preservative. Endotoxin level is <0.01 EU/µg of the protein (<0.001 ng/µg of the protein) as determined by the LAL test.
Preparation	The Ultra-LEAF™ (Low Endotoxin, Azide-Free) antibody was purified by affinity chromatography.
Concentration	The antibody is bottled at the concentration indicated on the vial, typically between 2 mg/mL and 3 mg/mL. Older lots may have also been bottled at 1 mg/mL. To obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C. This Ultra-LEAF™ solution contains no preservative; handle under aseptic conditions.
Application	WB - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by Western blotting . For Western blotting, the suggested use of this reagent is 1.0 - 10.0 µg per ml. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes	Additional reported applications (for the relevant formats) include: immunofluorescence microscopy ^{1,2,3,6} , immunohistochemical staining ⁴ , and immunoprecipitation ^{2,5,7} . For <i>in vivo</i> studies or highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Cat. No. 844703) with a lower endotoxin limit than standard LEAF™ purified antibodies (Endotoxin <0.01 EU/µg).
Application References	<ol style="list-style-type: none"> 1. Wahl JK, <i>et al.</i> 2003. <i>J. Biol. Chem.</i> 278:17269. (WB, IF) 2. Knudsen KA, <i>et al.</i> 1995. <i>J. Cell Biol.</i> 130:67. (WB, IF, IP) 3. Machell NH, <i>et al.</i> 2000. <i>Biol. Reprod.</i> 63:797. (WB, IF) 4. Han AC, <i>et al.</i> 1997. <i>Hum. Pathol.</i> 28:641. (IHC) 5. Van Aken EH, <i>et al.</i> 2002. <i>Invest Ophthalmol. Vis. Sci.</i> 43:595. (WB, IP) 6. Tian G, <i>et al.</i> 2009. <i>J. Biol. Chem.</i> 284:18980. (IF) 7. Nieman MT. 1999. <i>J. Cell Biol.</i> 147:631. (IP, WB)
(PubMed link indicates BioLegend citation)	

RRID

AB_2565807 (BioLegend Cat. No. 844703)

Antigen Details

Structure	Member of cadherin family, single pass transmembrane protein, extracellular region consists of five extracellular cadherin domains, one cytoplasmic domain, 130 kD.
Distribution	Cell membrane, stem cells, myeloblasts, endothelial cells, fibroblasts, neural and muscle tissues, and some types of carcinoma cells.
Function	Embryonic development, maintain tissue architecture, cell sorting and cell adhesion in tissues, promote motility, cell junction organization, pre and post synaptic adhesion, and ERK signaling.
Interaction	Catenins.
Cell Type	Mesenchymal Stem Cells, Neural Stem Cells
Biology Area	Cell Biology, Neuroinflammation, Neuroscience, Neuroscience Cell Markers, Signal Transduction, Stem Cells, Synaptic Biology
Molecular Family	Adhesion Molecules, CD Molecules
Antigen References	1. Hirano S, <i>et al.</i> 2012. <i>Physiol. Rev.</i> 92:597.
Gene ID	1000

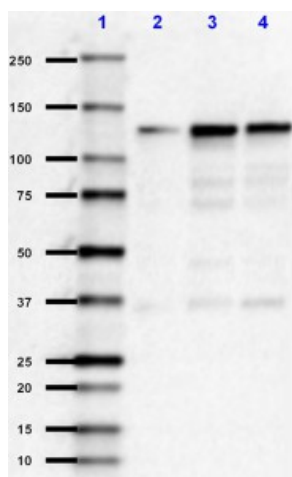
Related Protocols

[Western Blotting Protocol](#)

Other Formats

Ultra-LEAF™ Purified anti-CD325 (N-Cadherin), Purified anti-CD325 (N-Cadherin)

Product Data



Western blot of Ultra-LEAF™ Purified anti-CD325 (N-Cadherin) antibody (clone 13A9). Lane 1: Molecular weight marker; Lane 2: 10 µg of human brain membrane lysate; Lane 3: 10 µg of mouse brain membrane lysate; Lane 4: 10 µg of rat brain membrane lysate. The blot was incubated with 1 µg/mL of the primary antibody overnight at 4°C, followed by incubation with HRP labeled goat anti-mouse IgG (Cat. No. 405306). Enhanced chemiluminescence was used as the detection system.

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BioLegend Inc., 8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587