

# N-Cadherin / Cadherin-2 / CD325 Monoclonal Mouse Antibody (13A9)

## Product Description

This antibody recognizes a protein of ~140 kDa, identified as N-Cadherin (NCAD), also known as CD325. NCAD is a member of the Cadherin superfamily, and consists of five extracellular repeats, a transmembrane domain and a cytoplasmic domain. CD325 deficient mice die at day 10 of gestation and embryos display major heart defects and malformed neural tubes and somites. Consistent with this, CD325 has been implicated in several aspects of cardiac development including the precardiac mesoderm, establishment of left-right symmetry and cardiac looping morphogenesis. Furthermore, CD325 is normally involved in inducing cell cycle arrest and its expression is frequently deregulated in cancer cells. Studies have linked N-cadherin to cancer metastasis by showing the aggressive tumor cells had preferentially turned on N-cadherin as opposed to E- or P-cadherin.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

**Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email [order@biotium.com](mailto:order@biotium.com) to inquire about stock status and lead times before placing your order.

**Catalog number key for antibody number 1425, Anti-Cadherin-2 (13A9)**

## Product attributes

Antibody number	#1425
Antibody reactivity (target)	Cadherin-2, CD325, N-Cadherin
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	13A9
Isotype	IgG1, kappa
Molecular weight	130-140 kDa
Synonyms	Cadherin-2 N cadherin neuronal; Cadherin-2 type 1; Cadherin-2; Calcium dependent adhesion protein neuronal; CD325; CDH2; CDHN; CDW325; N-Cadherin; NCAD
Human gene symbol	CDH2
Entrez gene ID	1000
SwissProt	P19022
Unigene	464829
Immunogen	Recombinant human N-cadherin cytoplasmic domain (exact sequence is proprietary)
Antibody target cellular localization	Plasma membrane
Species reactivity	Human, Mouse
Expected antibody applications	IHC (FFPE) (published for clone), IP (published for clone), WB (published for clone)
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Immunofluorescence: 1-2 ug/mL, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Western blotting 0.5-1 ug/mL. Optimal dilution for a specific application should be determined by user
Positive control	HeLa or HUVEC cells. Heart, Pancreas or Cerebral Cortex
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C. Protect fluorescent conjugates from light. Note: store BSA-free antibodies at -10 to -35 °C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Antibody research areas	Cancer, Cell adhesion, Developmental biology
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum ( <i>Bos taurus</i> ), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.
Tumor expression	Metastatic cells

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	<a href="#">CF®405S Features</a>
BNC88	CF®488A	490/515	488	GFP, FITC	<a href="#">CF®488A Features</a>
BNC68	CF®568	562/583	532, 561	RFP, TRITC	<a href="#">CF®568 Features</a>
BNC94	CF®594	593/614	561	Texas Red®	<a href="#">CF®594 Features</a>
BNC40	CF®640R	642/662	633-640	Cy®5	<a href="#">CF®640R Features</a>
BNC47	CF®647	650/665	633-640	Cy®5	<a href="#">CF®647 Features</a>
BNC74	CF®740	742/767	633-685	775/50	<a href="#">CF®740 Features</a>
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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## References

Note: References for this clone sold by other suppliers may be listed for expected applications.

- J Biol Chem (1995) 270(34): 20201-20206. (IP; WB)
- J Cell Biol Volume (1996) 135(6 Pt 1): 1643-1654. (IP; WB; IF)
- J Histochem Histopathol (2014) 1:4. <http://dx.doi.org/10.7243/2055-091X-1-4> (IHC, FFPE)

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