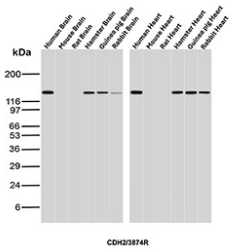
CDH2 Antibody / N-Cadherin Cross-Species Reactivity Antibody [clone CDH2/3874R] (V8423)

Catalog No.	Formulation	Size
V8423-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8423-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8423SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

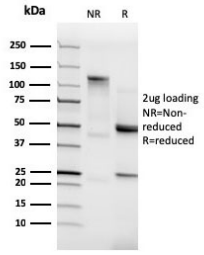
Recombinant RABBIT MONOCLONAL

Bulk quote request

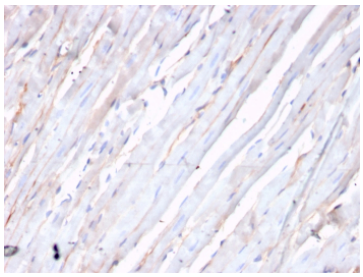
Availability	1-3 business days
Species Reactivity	Human, Hamster, Rabbit, Guinea pig
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	CDH2/3874R
Purity	Protein A affinity chromatography
UniProt	P19022
Localization	Cell surface, cytoplasmic
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 minutes at RT (Human) Western blot: 2-4ug/ml (Human/Hamster/Rabbit/Guinea pig)
Limitations	This CDH2 Antibody / N-Cadherin Cross-Species Reactivity Antibody is available for research use only.



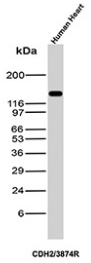
CDH2 Antibody Brain and Heart Tissue WB. Western blot analysis of N-Cadherin / CDH2 expression across multi-species brain and heart tissue lysates using CDH2 antibody clone CDH2/3874R. Lane 1: human brain lysate, Lane 2: mouse brain lysate, Lane 3: rat brain lysate, Lane 4: hamster brain lysate, Lane 5: guinea pig brain lysate, Lane 6: rabbit brain lysate, Lane 7: human heart lysate, Lane 8: mouse heart lysate, Lane 9: rat heart lysate, Lane 10: hamster heart lysate, Lane 11: guinea pig heart lysate, Lane 12: rabbit heart lysate. A band is detected at approximately 120-135 kDa, consistent with the predicted molecular weight of N-Cadherin (CDH2), with the higher apparent migration reflecting known glycosylation of this transmembrane adhesion protein. Consistent detection across species and tissues supports the use of this CDH2 Antibody / N-Cadherin Cross-Species Reactivity Antibody for comparative studies, reflecting the conserved expression of N-Cadherin in both neural and cardiac systems.



SDS-PAGE analysis of purified, BSA-free recombinant CDH2 antibody as confirmation of integrity and purity.



CDH2 Antibody Heart Tissue IHC. Immunohistochemical analysis of N-Cadherin / CDH2 expression in formalin-fixed, paraffin-embedded human heart tissue using CDH2 antibody. Membranous and cytoplasmic staining is observed in cardiomyocytes, with signal accentuated along cell-cell junctions consistent with localization at intercalated discs. The staining highlights elongated cardiac muscle fibers with expected structural organization, while surrounding stromal areas show minimal background. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



CDH2 Antibody Tissue WB. Western blot analysis of N-Cadherin / CDH2 expression in human heart tissue lysate using CDH2 antibody clone CDH2/3874R. Lane 1: human heart lysate. A strong band is detected at approximately 120-135 kDa, consistent with the predicted molecular weight of N-Cadherin (CDH2), with the higher apparent migration reflecting known glycosylation of this transmembrane adhesion protein. The prominent signal in heart tissue is consistent with the essential role of N-Cadherin in maintaining cardiomyocyte adhesion and intercalated disc integrity.

Description

Cadherin 2 (CDH2), also known as N-Cadherin, is a classical calcium-dependent adhesion molecule that mediates stable cell-cell binding in tissues requiring coordinated structural integrity and communication. Full-length N-Cadherin / CDH2 is a single-pass transmembrane glycoprotein localized mainly at the plasma membrane, where it forms adherens junctions through homophilic interactions and supports linkage to the actin cytoskeleton through catenin family proteins. The exact primary keyword phrase CDH2 Antibody / N-Cadherin Cross-Species Reactivity Antibody is especially well suited to studies that require detection of this highly conserved protein across multiple vertebrate model systems.

CDH2 antibody, also referred to as N-Cadherin antibody and Cadherin 2 antibody in the literature, recognizes a protein with major biological roles in both neural and cardiac tissues. In the nervous system, N-Cadherin supports neuronal migration, neurite extension, synapse assembly, and maintenance of tissue architecture during development and in adult brain. In the heart, it is a key adhesion component of intercalated discs, where it helps maintain cardiomyocyte alignment and mechanical coupling. These established roles make CDH2 a strong target for comparative studies spanning human

tissue and common laboratory species.

A major strength of clone CDH2/3874R is the cross-species reactivity angle supported by western blot detection in brain and heart lysates from human, mouse, rat, hamster, guinea pig, and rabbit. That pattern fits the known evolutionary conservation of N-Cadherin, particularly within functionally important extracellular cadherin repeats and the cytoplasmic domain involved in catenin binding. For a catalog containing many CDH2 pages, this gives the antibody a practical differentiation point because the data directly support use in multi-species experimental designs rather than only a single tissue or single application context.

Structurally, N-Cadherin contains five extracellular cadherin domains, one transmembrane segment, and a conserved intracellular tail that recruits beta-catenin, p120-catenin, and related junctional partners. This architecture is central to adherens junction formation and tissue cohesion, and it also helps explain why CDH2 remains relevant across developmental biology, neurobiology, cardiovascular research, and cancer biology. Apparent migration on SDS-PAGE is often slightly higher than sequence-based expectation because CDH2 is glycosylated, a feature commonly observed for mature cadherin family proteins in tissue lysates.

Beyond normal tissue biology, CDH2 has strong disease relevance. Altered N-Cadherin expression has been linked to tumor progression, invasive behavior, fibrosis, and remodeling responses in several organs. In cancer research, increased N-Cadherin is often discussed in the context of epithelial-to-mesenchymal transition, where it accompanies a more migratory and invasive phenotype. In cardiovascular studies, disrupted CDH2-mediated adhesion can affect myocardial organization and cell-cell stability. Because these questions are frequently examined in both human samples and animal models, a cross-species CDH2 antibody offers a useful bridge between mechanistic studies and translational research.

Clone CDH2/3874R therefore fits a valuable niche as a N-Cadherin antibody for investigators working across species boundaries. The combination of strong brain and heart western blot data, conserved target biology, and relevance to adhesion signaling in both normal and disease settings makes this antibody particularly attractive for studies comparing expression patterns among vertebrate tissues. For users seeking a CDH2 antibody with a clear, evidence-based differentiation angle, cross-species reactivity is one of the most credible and scalable positions for this page.

For additional information on Cadherin 2/N-Cadherin and its roles in cell-cell adhesion, epithelial-mesenchymal transition, and cancer biology, see our Cadherin 2 Antibody / CDH2 page.

Application Notes

Optimal dilution of the CDH2 Antibody / N-Cadherin Cross-Species Reactivity Antibody should be determined by the researcher.

Immunogen

Recombinant full-length human protein was used as the immunogen for the recombinant CDH2 antibody.

Storage

Store the CDH2 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

N-Cadherin antibody, Cadherin 2 antibody, CDH2 WB antibody, N-Cadherin multi-species antibody, CDH2 cross-reactivity antibody

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