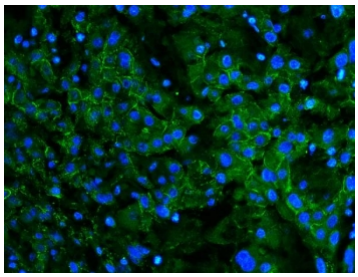
Cadherin 2 Antibody / CDH2 (RQ6245)

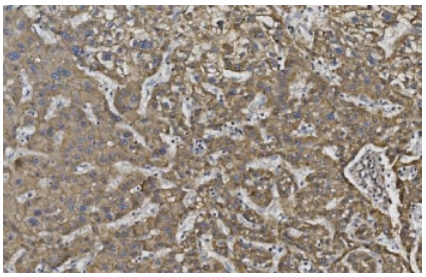
Catalog No.	Formulation	Size
RQ6245	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

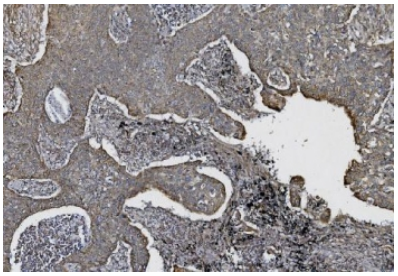
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P19022
Applications	Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Flow cytometry: 1-3ug/million cells Immunofluorescence: 5ug/ml Direct ELISA: 0.1-0.5ug/ml
Limitations	This Cadherin 2 antibody is available for research use only.



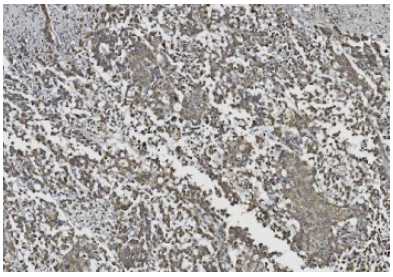
Cadherin 2 Antibody Human Liver Cancer IF. Immunofluorescent staining of FFPE human liver cancer tissue with Cadherin 2 Antibody (green) and DAPI nuclear stain (blue). Heat-induced epitope retrieval was performed by boiling tissue sections in pH8 EDTA buffer for 20 minutes followed by cooling. Green fluorescence demonstrates Cadherin 2 expression within the tumor tissue, with nuclei counterstained blue. This Cadherin 2 Antibody, also called CDH2 Antibody, supports studies of cell-cell adhesion, epithelial-mesenchymal transition, and cancer biology.



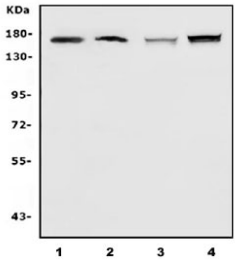
Cadherin 2 Antibody Human Liver Cancer IHC. Immunohistochemical staining of FFPE human liver cancer tissue with Cadherin 2 Antibody demonstrates CDH2 expression. Heat-induced epitope retrieval was performed by boiling tissue sections in pH8 EDTA buffer for 20 minutes followed by cooling. Brown staining is observed throughout the tumor tissue, with hematoxylin counterstaining in blue. This Cadherin 2 Antibody, also called CDH2 Antibody, supports studies of cell-cell adhesion, epithelial-mesenchymal transition, and cancer biology.



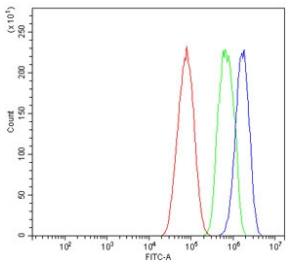
Cadherin 2 Antibody Human Lung Cancer IHC. Immunohistochemical staining of FFPE human lung cancer tissue with Cadherin 2 Antibody demonstrates CDH2 expression. Heat-induced epitope retrieval was performed by boiling tissue sections in pH8 EDTA buffer for 20 minutes followed by cooling. Brown staining is observed within the tumor tissue, with hematoxylin counterstaining in blue. This Cadherin 2 Antibody, also called CDH2 Antibody, supports studies of cell-cell adhesion, epithelial-mesenchymal transition, and lung cancer biology.



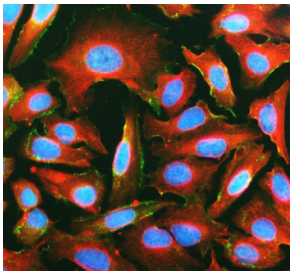
Cadherin 2 Antibody Human Pancreatic Cancer IHC. Immunohistochemical staining of FFPE human pancreatic cancer tissue with Cadherin 2 Antibody demonstrates CDH2 expression. Heat-induced epitope retrieval was performed by boiling tissue sections in pH8 EDTA buffer for 20 minutes followed by cooling. Brown staining is observed within the tumor tissue, with hematoxylin counterstaining in blue. This Cadherin 2 Antibody, also called CDH2 Antibody, supports studies of cell-cell adhesion, epithelial-mesenchymal transition, and pancreatic cancer biology.



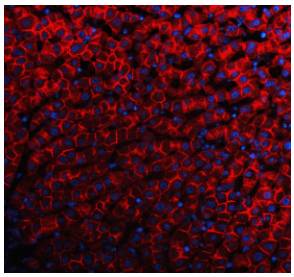
Cadherin 2 Antibody Human, Rat and Mouse WB. Western blot testing of human A549 (lane 1), human HEK293 (lane 2), rat liver (lane 3), and mouse liver (lane 4) lysates with Cadherin 2 Antibody. The unmodified protein has a predicted molecular weight of approximately 100 kDa, while modified forms may be observed at approximately 125â€“140 kDa. Immunoreactive bands are detected above this range at approximately 160â€“170 kDa across the tested samples. This Cadherin 2 Antibody, also called CDH2 Antibody, supports studies of cadherin expression, cell-cell adhesion, and epithelial-mesenchymal transition.



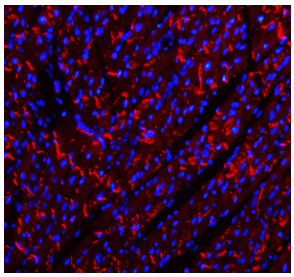
Cadherin 2 Antibody Human HepG2 Cell FACS. Flow cytometry analysis of human HepG2 cells with Cadherin 2 Antibody at 1 ug/million cells following blocking with goat serum. The histogram shows cells alone (red), isotype control (green), and antibody-stained cells (blue). The rightward shift of the antibody-stained population relative to the isotype control demonstrates detection of Cadherin 2 in HepG2 cells. This Cadherin 2 Antibody, also called CDH2 Antibody, supports studies of N-Cadherin expression, cell-cell adhesion, epithelial-mesenchymal transition, and cancer biology.



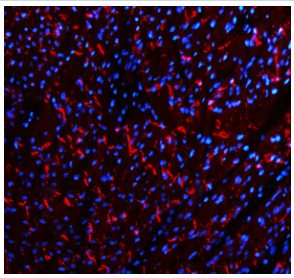
Cadherin 2 Antibody Human HeLa Cell IF. Immunofluorescent staining of human HeLa cells with Cadherin 2 Antibody (green), Alpha Tubulin monoclonal antibody (red), and DAPI nuclear stain (blue). Heat-induced epitope retrieval was performed by steaming in pH6 citrate buffer for 20 minutes. Green fluorescence demonstrates Cadherin 2 expression, with Alpha Tubulin staining providing cytoskeletal visualization and DAPI identifying nuclei. This Cadherin 2 Antibody, also called CDH2 Antibody, supports studies of N-Cadherin localization, cell-cell adhesion, epithelial-mesenchymal transition, and cancer cell biology.



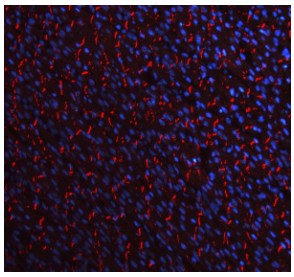
Cadherin 2 Antibody Human Liver Tissue IF. Immunofluorescent staining of FFPE human liver tissue with Cadherin 2 Antibody at 5 ug/ml demonstrates CDH2 expression (red). Heat-induced epitope retrieval was performed in pH8 EDTA buffer, followed by blocking with 10% goat serum. Sections were incubated with primary antibody overnight at 4Â°C, followed by Cy3-conjugated secondary antibody, with DAPI nuclear counterstain (blue). Prominent red fluorescence is observed along cell borders and membranes. This Cadherin 2 Antibody, also called CDH2 Antibody, supports studies of N-Cadherin localization, cell-cell adhesion, and tissue organization.



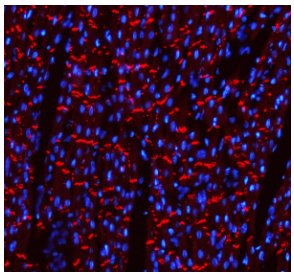
Cadherin 2 Antibody Mouse Heart Tissue IF. Immunofluorescent staining of FFPE mouse heart tissue with Cadherin 2 Antibody at 5 ug/ml demonstrates CDH2 expression (red). Heat-induced epitope retrieval was performed in pH8 EDTA buffer, followed by blocking with 10% goat serum. Sections were incubated with primary antibody overnight at 4Â°C, followed by Cy3-conjugated secondary antibody, with DAPI nuclear counterstain (blue). Red fluorescence demonstrates Cadherin 2 localization within the cardiac tissue. This Cadherin 2 Antibody, also called CDH2 Antibody, supports studies of N-Cadherin expression, cell-cell adhesion, and cardiac tissue organization.



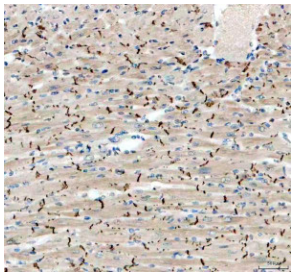
Cadherin 2 Antibody Mouse Cardiac Tissue IF. Immunofluorescent staining of FFPE mouse heart tissue with Cadherin 2 Antibody at 5 ug/ml demonstrates CDH2 expression (red). Heat-induced epitope retrieval was performed in pH8 EDTA buffer, followed by blocking with 10% goat serum. Sections were incubated with primary antibody overnight at 4Â°C, followed by Cy3-conjugated secondary antibody, with DAPI nuclear counterstain (blue). Red fluorescence demonstrates Cadherin 2 localization within the cardiac tissue. This Cadherin 2 Antibody, also called CDH2 Antibody, supports studies of N-Cadherin expression, cell-cell adhesion, and cardiac biology.



Cadherin 2 Antibody Rat Heart Tissue IF. Immunofluorescent staining of FFPE rat heart tissue with Cadherin 2 Antibody at 5 ug/ml demonstrates CDH2 expression (red). Heat-induced epitope retrieval was performed in pH8 EDTA buffer, followed by blocking with 10% goat serum. Sections were incubated with primary antibody overnight at 4Â°C, followed by Cy3-conjugated secondary antibody, with DAPI nuclear counterstain (blue). Red fluorescence demonstrates Cadherin 2 localization within the cardiac tissue. This Cadherin 2 Antibody, also called CDH2 Antibody, supports studies of N-Cadherin expression, cell-cell adhesion, and cardiac tissue biology.



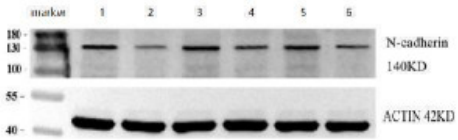
Cadherin 2 Antibody Rat Cardiac Tissue IF. Immunofluorescent staining of FFPE rat heart tissue with Cadherin 2 Antibody at 5 ug/ml demonstrates CDH2 expression (red). Heat-induced epitope retrieval was performed in pH8 EDTA buffer, followed by blocking with 10% goat serum. Sections were incubated with primary antibody overnight at 4Â°C, followed by Cy3-conjugated secondary antibody, with DAPI nuclear counterstain (blue). Red fluorescence demonstrates Cadherin 2 localization within the cardiac tissue. This Cadherin 2 Antibody, also called CDH2 Antibody, supports studies of N-Cadherin expression, cell-cell adhesion, and cardiac biology.



Cadherin 2 Antibody Mouse Heart IHC. Immunohistochemical staining of FFPE mouse heart tissue with Cadherin 2 Antibody at 2 ug/ml demonstrates CDH2 expression. Heat-induced epitope retrieval was performed in pH8 EDTA buffer, followed by blocking with 10% goat serum. Sections were incubated with primary antibody overnight at 4Â°C and developed with DAB chromogen. Distinct brown staining is observed at cell-cell junctions within the cardiac tissue, consistent with N-Cadherin localization in cardiomyocytes. This Cadherin 2 Antibody, also called CDH2 Antibody, supports studies of N-Cadherin expression, cardiac cell adhesion, and intercalated disc organization.



Cadherin 2 Antibody Rat Heart IHC. Immunohistochemical staining of FFPE rat heart tissue with Cadherin 2 Antibody at 2 ug/ml demonstrates CDH2 expression. Heat-induced epitope retrieval was performed in pH8 EDTA buffer, followed by blocking with 10% goat serum. Sections were incubated with primary antibody overnight at 4Â°C and developed with DAB chromogen. Distinct brown staining is observed at cell-cell junctions within the cardiac tissue, consistent with N-Cadherin localization in cardiomyocytes. This Cadherin 2 Antibody, also called CDH2 Antibody, supports studies of N-Cadherin expression, cardiac cell adhesion, and intercalated disc organization.



Cadherin 2 Antibody Human Cervical Cancer WB. Western blot analysis of paired human cervical cancer and adjacent tissue lysates with Cadherin 2 Antibody at 1:1000. Lanes 1, 3, and 5 contain cervical cancer tissue lysates; lanes 2, 4, and 6 contain corresponding adjacent tissue lysates. A prominent band is detected at approximately 140 kDa, consistent with the expected molecular weight of approximately 150 kDa for N-Cadherin/CDH2. Actin at approximately 42 kDa is shown as a loading control. This Cadherin 2 Antibody, also called CDH2 Antibody, supports studies of N-Cadherin expression, epithelial-mesenchymal transition, and cervical cancer biology.

Description

Cadherin 2 Antibody / CDH2 recognizes Cadherin 2, a calcium-dependent cell adhesion protein encoded by the CDH2 gene and widely known as N-Cadherin. As a member of the classical cadherin superfamily, Cadherin 2 mediates homophilic cell-cell adhesion and is a major component of adherens junctions. Its extracellular domains participate in calcium-dependent interactions between neighboring cells, while its cytoplasmic region associates with catenins and the actin cytoskeleton. Through these interactions, CDH2 contributes to tissue architecture, cellular polarity, migration, differentiation, and intracellular signaling. Cadherin 2 is particularly important in neural, cardiac, and mesenchymal tissues and during embryonic development.

In the nervous system, N-Cadherin participates in neural development, neuronal migration, axon guidance, synapse formation, and synaptic plasticity. Dynamic regulation of Cadherin 2-mediated adhesion allows developing and mature neural cells to alter their interactions while maintaining appropriate tissue organization. CDH2 also has essential functions in cardiac tissue, where N-Cadherin-containing adherens junctions contribute to mechanical coupling between cardiomyocytes and organization of intercalated discs. A Cadherin 2 Antibody can therefore support studies of neural tissue organization, cardiac development, cell-cell junctions, and mechanisms regulating tissue morphogenesis.

Cadherin 2 is also extensively studied in epithelial-mesenchymal transition (EMT) and cancer biology. During EMT, epithelial cells can lose epithelial characteristics while acquiring mesenchymal properties associated with increased motility and invasiveness. A frequently studied feature of this process is the cadherin switch, characterized by reduced E-Cadherin expression together with increased N-Cadherin expression. Elevated CDH2 can promote altered cell adhesion, migration, invasion, and interactions with surrounding stromal cells. Cadherin 2 Antibody reagents are consequently useful for investigating EMT, tumor progression, metastatic behavior, cellular differentiation, and changes in adhesion-associated signaling.

Because N-Cadherin connects extracellular cell-cell interactions with cytoskeletal organization and signaling, changes in its expression or localization can have broad effects on tissue development and disease biology. CDH2 is studied in developmental disorders, cardiovascular biology, nervous system function, tissue repair, and multiple forms of cancer. NSJ Bioreagents offers antibodies for studying adhesion-associated proteins and related cellular pathways. A Cadherin 2 Antibody is useful for investigating CDH2/N-Cadherin expression, adherens junctions, neural and cardiac tissue organization, epithelial-mesenchymal transition, cell migration, and cancer biology.

Explore our Cancer Marker Antibodies page to find additional antibodies for studying tumor development, epithelial-mesenchymal transition, cancer progression, and related signaling pathways.

Application Notes

Optimal dilution of the Cadherin 2 antibody should be determined by the researcher.

Immunogen

A human recombinant partial protein (amino acids E170-E266) was used as the immunogen for the Cadherin 2 antibody.

Storage

After reconstitution, the Cadherin 2 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Ordering: Phone: 858.663.9055 | Fax: 1.267.821.0800 | Email: info@nsjbio.com
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