abcam

ab225719

Anti-N-Cadherin/CD325 antibody [SP90] - C-terminal

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.6 Preservative: 0.1% Sodium azide Constituents: PBS, 1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	SP90
Purification technique	Affinity purification Protein A/G
Concentration	0.005 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purified from TCS by protein A/G.

Reactivity data

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-

Notes	-

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Cow
Dilution info	-
Notes	-

IHC-P

Tested

Species	Mouse
Dilution info	1/100
Notes	Antigen retrieval: Boil tissue section in 1mM EDTA, pH 8.0 for 10 minutes followed by cooling at room temperature for 20 minutes.

Species	Rat
Dilution info	1/100
Notes	Antigen retrieval: Boil tissue section in 1mM EDTA, pH 8.0 for 10 minutes followed by cooling at room temperature for 20 minutes.

Species	Human
Dilution info	1/100
Notes	Antigen retrieval: Boil tissue section in 1mM EDTA, pH 8.0 for 10 minutes followed by cooling at room temperature for 20 minutes.

Predicted

Species	Cow
Dilution info	-

Notes	-

Target data

See full target information N-Cadherin/CD325

Function	Calcium-dependent cell adhesion protein; preferentially mediates homotypic cell-cell adhesion by dimerization with a CDH2 chain from another cell. 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. Plays a role in cell-to-cell junction formation between pancreatic beta cells and neural crest stem (NCS) cells, promoting the formation of processes by NCS cells (By similarity). Required for proper neurite branching. Required for pre- and postsynaptic organization (By similarity). CDH2 may be involved in neuronal recognition mechanism. In hippocampal neurons, may regulate dendritic spine density. May promote axon outgrowth and motor fiber repair via DSP-mediated recruitment to outgrowth tips (By similarity).

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	N-Cadherin also known as CDH2 or neuronal cadherin is a calcium-dependent cell adhesion protein. It is characterized by its role in mediating intercellular connections primarily through its presence on neurons fibroblasts and certain epithelial cells. N-Cadherin has an approximate mass of 130 kDa. The protein is integral in forming homophilic interactions where N-Cadherin molecules on adjacent cells interact to establish robust cell-cell adhesion.

Biological function summary	N-Cadherin significantly influences cell-cell interaction and communication facilitating cellular adhesion and signal transduction. It is a vital component of adherens junctions contributing to tissue morphogenesis and stability. N-Cadherin interacts with other cytoplasmic proteins such as catenins forming a complex essential for linking the actin cytoskeleton to the cell membrane. This interaction affects cellular behaviors including migration and differentiation.
Pathways	N-Cadherin plays a significant role in the neural development and epithelial-to-mesenchymal transition (EMT) pathways important for development and cancer progression. It engages with related proteins such as beta-catenin which helps transduce signals within these pathways. N-Cadherin's interactions within these pathways highlight its role in maintaining multicellular structure and signaling processes important for development and pathogenesis.
Associated diseases and disorders	N-Cadherin is associated with cancer and heart disease. In cancer particularly in the context of the EMT N-Cadherin facilitates tumor progression and metastasis cooperating with proteins like Twist and Snail to promote these processes. In heart disease alterations in N-Cadherin expression and function can impact cardiac muscle integrity and syncytium highlighting potential interactions with connexin43 to maintain cardiac function. Understanding these associations provides insights into therapeutic targets for these conditions.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

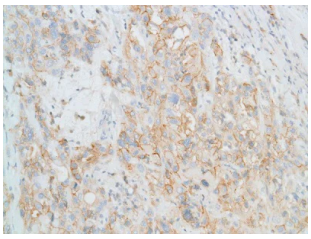
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

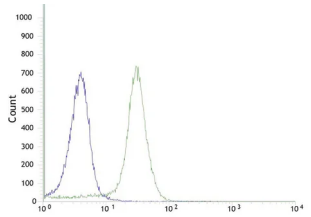
13 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-N-Cadherin/CD325 antibody [SP90] - C-terminal (ab225719)

N-Cadherin/CD325 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-N-Cadherin/CD325 antibody

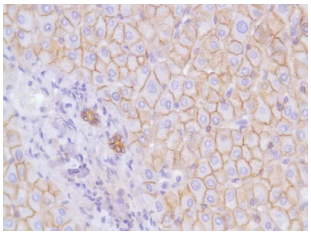
Formalin-fixed, paraffin-embedded human mesothelioma tissue stained for N Cadherin with ab225719 at 1/100 dilution in immunohistochemical analysis.



Flow Cytometry (Intracellular) - Anti-N-Cadherin/CD325 antibody [SP90] - C-terminal (ab225719)

N-Cadherin/CD325 Flow Cytometry (Intracellular) staining using rabbit Anti-N-Cadherin/CD325 antibody

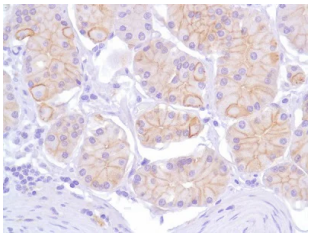
Flow cytometric analysis of HeLa (human epithelial cell line from cervix adenocarcinoma) cell line labeling N Cadherin with ab225719 (green) compared with an isotype control rabbit IgG (blue).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-N-Cadherin/CD325 antibody [SP90] - C-terminal (ab225719)

N-Cadherin/CD325 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-N-Cadherin/CD325 antibody

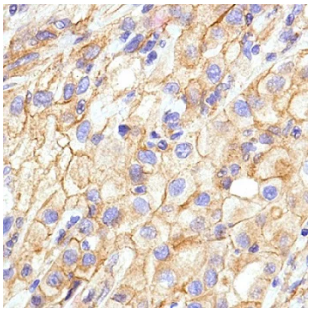
Formalin-fixed, paraffin-embedded human liver tissue stained for N Cadherin with ab225719 at 1/100 dilution in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-N-Cadherin/CD325 antibody [SP90] - C-terminal (ab225719)

N-Cadherin/CD325 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-N-Cadherin/CD325 antibody

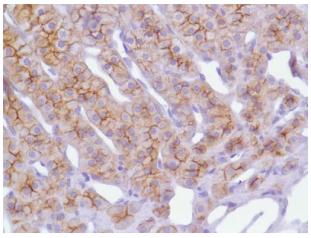
Formalin-fixed, paraffin-embedded human stomach tissue stained for N Cadherin with ab225719 at 1/100 dilution in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-N-Cadherin/CD325 antibody [SP90] - C-terminal (ab225719)

N-Cadherin/CD325 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-N-Cadherin/CD325 antibody

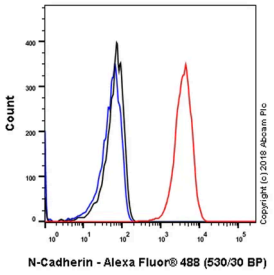
Formalin-fixed, paraffin-embedded human mesothelioma tissue stained for N Cadherin with ab225719 at 1/100 dilution in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-N-Cadherin/CD325 antibody [SP90] - C-terminal (ab225719)

N-Cadherin/CD325 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-N-Cadherin/CD325 antibody

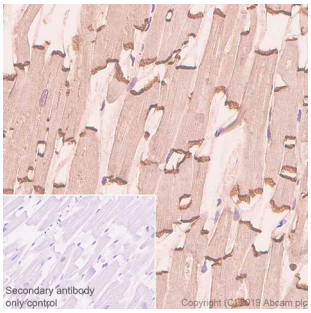
Formalin-fixed, paraffin-embedded human adrenal gland tissue stained for N Cadherin with ab225719 at 1/100 dilution in immunohistochemical analysis.



Flow Cytometry (Intracellular) - Anti-N-Cadherin/CD325 antibody [SP90] - C-terminal (ab225719)

N-Cadherin/CD325 Flow Cytometry (Intracellular) staining using rabbit Anti-N-Cadherin/CD325 antibody

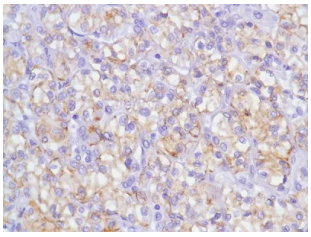
Flow cytometry analysis of Hela (human cervix adenocarcinoma) labeling N Cadherin with purified ab225719 (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) was used as a secondary antibody. Isotype control - Rabbit monoclonal IgG (ab172730) (Black). Unlableled control - Unlabelled cells (blue).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-N-Cadherin/CD325 antibody [SP90] - C-terminal (ab225719)

N-Cadherin/CD325 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-N-Cadherin/CD325 antibody

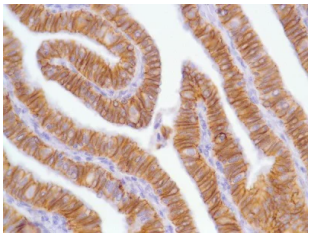
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human heart tissue sections labeling N Cadherin with Purified ab225719 at 1/100 dilution (0.56 µg/ml). Heat mediated antigen retrieval was performed Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20mins. Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-N-Cadherin/CD325 antibody [SP90] - C-terminal (ab225719)

N-Cadherin/CD325 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-N-Cadherin/CD325 antibody

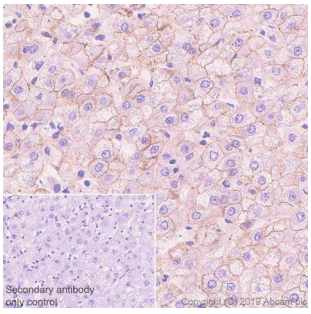
Formalin-fixed, paraffin-embedded human renal cell carcinoma tissue stained for N Cadherin with ab225719 at 1/100 dilution in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-N-Cadherin/CD325 antibody [SP90] - C-terminal (ab225719)

N-Cadherin/CD325 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-N-Cadherin/CD325 antibody

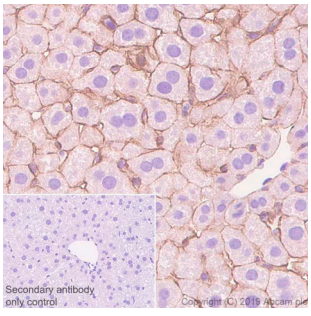
Formalin-fixed, paraffin-embedded human fallopian tube tissue stained for N Cadherin with ab225719 at 1/100 dilution in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-N-Cadherin/CD325 antibody [SP90] - C-terminal (ab225719)

N-Cadherin/CD325 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-N-Cadherin/CD325 antibody

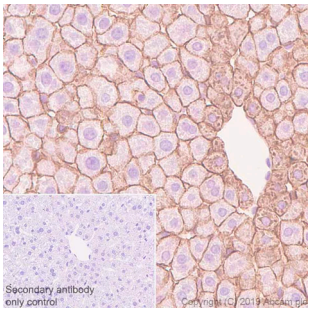
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human liver tissue sections labeling N Cadherin with Purified ab225719 at 1/100 dilution (0.56 µg/ml). Heat mediated antigen retrieval was performed Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20mins. Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-N-Cadherin/CD325 antibody [SP90] - C-terminal (ab225719)

N-Cadherin/CD325 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-N-Cadherin/CD325 antibody

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Mouse liver tissue sections labeling N Cadherin with Purified ab225719 at 1/100 dilution (0.56 µg/ml). Heat mediated antigen retrieval was performed Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20mins. Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-N-Cadherin/CD325 antibody [SP90] - C-terminal (ab225719)

N-Cadherin/CD325 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-N-Cadherin/CD325 antibody

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Rat liver tissue sections labeling N Cadherin with Purified ab225719 at 1/100 dilution (0.56 µg/ml). Heat mediated antigen retrieval was performed Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20mins. Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.