abcam

ab270294

Anti-Cadherin 16 antibody [CDH16/1532R] - BSA and Azide free

Recombinant

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Full Length Protein corresponding to Human CDH16. Database link O75309
Carrier free	Yes
Clone number	CDH16/1532R
Purification technique	Affinity purification Protein A
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	-

Notes	-

Expected

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

WB

Tested

Species	Human
Dilution info	1-2 µg/mL
Notes	-

Expected

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

IHC-P

Tested

Species	Mouse
Dilution info	1-2 µg/mL
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Rat
Dilution info	1-2 µg/mL
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Human

Dilution info	1-2 µg/mL
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Target data

See full target information CDH16

Function	Cadherins are calcium-dependent cell adhesion proteins. They preferentially interact with themselves in a homophilic manner in connecting cells; cadherins may thus contribute to the sorting of heterogeneous cell types.

Storage

Shipped at conditions	Blue Ice
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

Notes

ab270294 is a carrier free version of ab270263.
Conjugation ready
Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Supplementary info

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

Activity summary	Cadherin 16 also known as Ksp-cadherin is a calcium-dependent cell adhesion protein. It plays a role in mediating homophilic cell-cell adhesion facilitating the binding between identical cadherins on neighboring cells. The mass of cadherin 16 is approximately 92 kDa. This protein is mainly expressed in the kidney specifically in the distal convoluted tubules and collecting ducts where it is localized to the basolateral membrane of tubular epithelial cells.
Biological function summary	Cadherin 16 contributes to cell sorting and tissue morphogenesis. It does not operate as part of a multi-protein complex but interacts with the actin cytoskeleton through catenins like β-catenin to maintain cell adhesion and tissue integrity. The particular expression pattern of cadherin 16 suggests that it has a role in maintaining the structural organization of renal tissues and possibly influences renal tubular epithelial homeostasis.
Pathways	Cadherin 16 participates in cell signaling pathways essential for cell adhesion and tissue architecture. Specifically it engages in the Wnt signaling pathway where it coordinates with proteins like β-catenin indicating its indirect role in signal transduction that may affect gene transcription regarding cell growth and differentiation. Another key interaction for cadherin 16 is with integrins which are pivotal in mediating attachments between the extracellular matrix and the cell.
Associated diseases and disorders	Cadherin 16 is linked to renal-related conditions such as renal cell carcinoma and polycystic kidney disease. Abnormal expression or dysfunction of cadherin 16 could disrupt cell adhesion promoting renal cell carcinoma by facilitating cell detachment and metastatic progression. Additionally it connects with proteins like E-cadherin which are involved in epithelial-to-mesenchymal transition (EMT) a process often activated in cancer development and progression.

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

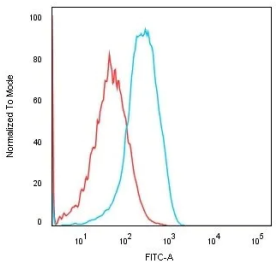
We do not recommend this combination. It is not covered by our product promise.

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.

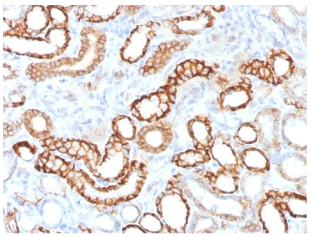
4 product images



Flow Cytometry - Anti-Cadherin 16 antibody [CDH16/1532R] - BSA and Azide free (ab270294)

Cadherin 16 Flow Cytometry staining using rabbit Anti-Cadherin 16 antibody

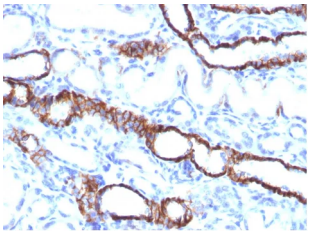
Flow cytometric analysis of HEK-293 (Human epithelial cell line from embryonic kidney) cells labeling Cadherin 16 (Blue) using ab270263 at 2µg/10^6 cells followed by goat anti-rabbit IgG-CF488; isotype control (Red).
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and sodium azide (ab270263).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cadherin 16 antibody [CDH16/1532R] - BSA and Azide free (ab270294)

Cadherin 16 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Cadherin 16 antibody

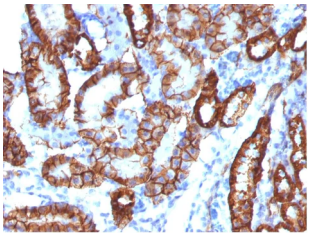
Formalin-fixed, paraffin-embedded human renal cell carcinoma stained for Cadherin 16 using ab270263 at 2 µg/ml in immunohistochemical analysis.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and sodium azide (ab270263).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cadherin 16 antibody [CDH16/1532R] - BSA and Azide free (ab270294)

Cadherin 16 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Cadherin 16 antibody

Formalin-fixed, paraffin-embedded rat kidney tissue stained for Cadherin 16 using ab270263 at 2 µg/ml in immunohistochemical analysis.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and sodium azide (ab270263).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cadherin 16 antibody [CDH16/1532R] - BSA and Azide free (ab270294)

Cadherin 16 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Cadherin 16 antibody

Formalin-fixed, paraffin-embedded mouse kidney tissue stained for Cadherin 16 using ab270263 at 2 µg/ml in immunohistochemical analysis.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and sodium azide (ab270263).

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