abcam

ab314230

Anti-Nectin 2 antibody [EPR28277-22] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR28277-22
Purification technique	Affinity purification Protein A
Concentration	1.011 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Mouse
Dilution info	-

Notes	-

Not recommended

Species	Human, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Mouse
Dilution info	-
Notes	-

Not recommended

Species	Human, Rat
Dilution info	-
Notes	-

IP

Tested

Species	Mouse
Dilution info	-
Notes	-

Not recommended

Species	Human, Rat
Dilution info	-
Notes	-

Flow Cyt

Tested

Species	Mouse
Dilution info	-
Notes	-

Not recommended

Species	Human, Rat
Dilution info	-
Notes	-

ICC/IF

Not recommended

Species	Mouse, Human, Rat
Dilution info	-
Notes	-

Target data

See full target information Nectin2

Function Modulator of T-cell signaling. Can be either a costimulator of T-cell function, or a coinhibitor, depending on the receptor it binds to. Upon binding to CD226, stimulates T-cell proliferation and cytokine production, including that of IL2, IL5, IL10, IL13, and IFNG. Upon interaction with PVRIG, inhibits T-cell proliferation. These interactions are competitive. Probable cell adhesion protein.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C

Notes

ab314230 is the carrier-free version of ab314229.

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

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.

Compatibility
This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

Supplementary info

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

Activity summary	Nectin 2 also known as CD112 is a transmembrane cell adhesion molecule belonging to the immunoglobulin superfamily. It plays a critical role in mediating cell-cell adhesion by forming homophilic and heterophilic interactions with other nectins. The protein has a mass of approximately 65 kDa and shows high expression in epithelial and endothelial cells. Nectin 2 has been identified in various tissues including the skin lung and kidney reflecting its importance in maintaining tissue integrity.
Biological function summary	Nectin 2 facilitates cell adhesion and communication playing an important role in the formation of adherens junctions. It serves as part of a larger biological complex with proteins such as afadin linking it to the actin cytoskeleton. Through these interactions Nectin 2 influences the signaling pathways that regulate tissue development and maintenance. Its ability to bind herpes virus entry mediator A (HVEM) further demonstrates its function in viral entry highlighting its diverse biological roles.
Pathways	Nectin 2 participates in the cell adhesion and immune response pathways. It works closely with Nectin 1 and Cadherins within these pathways to mediate cell-cell

junction formation and signaling. The interaction of Nectin 2 with intracellular proteins like afadin facilitates its role in the immunological synapse a critical zone for immune cell signaling. These pathways highlight its significance in both maintaining cellular architecture and modulating immune responses.

Associated diseases and disorders

Nectin 2 relates to cancer and viral infections. Its altered expression or dysfunction has links with tumor progression and metastasis particularly in epithelial-origin cancers like colorectal cancer. Through its role as a herpesvirus entry receptor it also connects to herpes simplex virus (HSV) infections. The interactions between Nectin 2 and other nectins such as Nectin 3 may affect cell proliferation and viral entry expanding the understanding of its involvement in disease mechanisms.

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

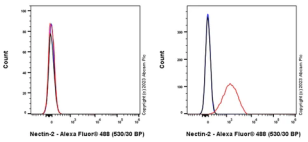
We do not recommend this combination. It is not covered by our product promise.

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.

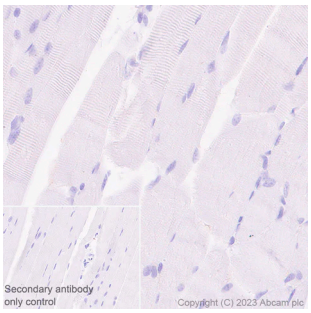
8 product images



Flow Cytometry - Anti-Nectin 2 antibody [EPR28277-22] - BSA and Azide free (ab314230)

This data was developed using ab314317, the same antibody clone in a different buffer formulation.Flow cytometric analysis of HeLa (human cervical adenocarcinoma epithelial cell) cells labelling FADS2 with ab314317 at 1/500 dilution (0.1 ug)/Red compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without

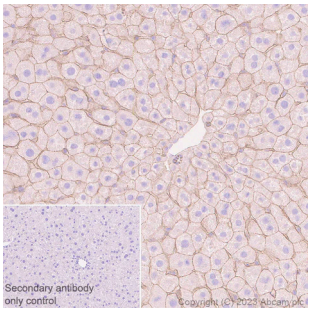
incubation with primary antibody and secondary antibody) (Blue). Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nectin 2 antibody [EPR28277-22] - BSA and Azide free (ab314230)

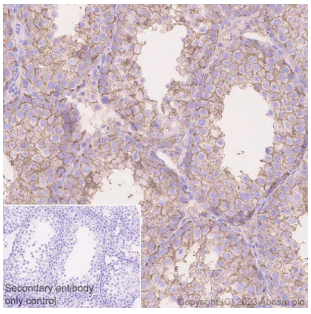
Nectin 2 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Mouse skeletal muscle using rabbit Anti-Nectin 2 antibody

This data was developed using ab314229, the same antibody clone in a different buffer formulation. Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle tissue labeling Nectin 2 with ab314229 at 1/500 (1.012 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Low expression: almost no staining on mouse skeletal muscle (PMID: 10744716). The section was incubated with ab314229 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



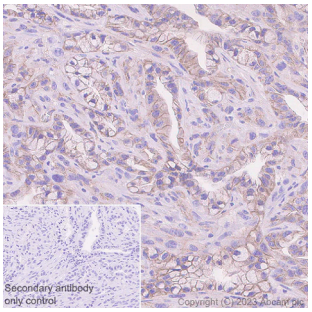
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nectin 2 antibody [EPR28277-22] - BSA and Azide free (ab314230)

This data was developed using ab314229, the same antibody clone in a different buffer formulation. Immunohistochemical analysis of paraffin-embedded mouse liver tissue labeling Nectin 2 with ab314229 at 1/500 (1.012 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Positive staining on mouse liver. The section was incubated with ab314229 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



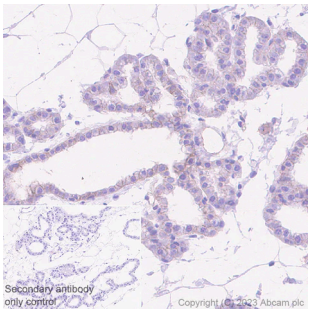
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nectin 2 antibody [EPR28277-22] - BSA and Azide free (ab314230)

This data was developed using ab314229, the same antibody clone in a different buffer formulation. Immunohistochemical analysis of paraffin-embedded mouse testis tissue labeling Nectin 2 with ab314229 at 1/500 (1.012 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Positive staining on mouse testis. The section was incubated with ab314229 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nectin 2 antibody [EPR28277-22] - BSA and Azide free (ab314230)

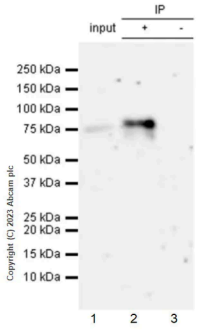
This data was developed using ab314229, the same antibody clone in a different buffer formulation. Immunohistochemical analysis of paraffin-embedded mouse pancreatic tumor tissue labeling Nectin 2 with ab314229 at 1/500 (1.012 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Positive staining on mouse pancreatic tumor. The section was incubated with ab314229 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nectin 2 antibody [EPR28277-22] - BSA and Azide free (ab314230)

Nectin 2 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Mouse breast using rabbit Anti-Nectin 2 antibody

This data was developed using ab314229, the same antibody clone in a different buffer formulation. Immunohistochemical analysis of paraffin-embedded mouse breast tissue labeling Nectin 2 with ab314229 at 1/500 (1.012 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Low expression: weak staining on mouse breast. The section was incubated with ab314229 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Immunoprecipitation - Anti-Nectin 2 antibody [EPR28277-22] - BSA and Azide free (ab314230)

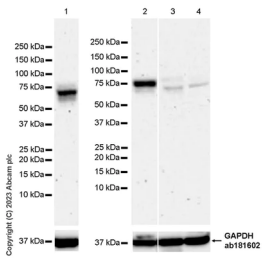
This data was developed using ab314229, the same antibody clone in a different buffer formulation. Nectin 2 was immunoprecipitated from 0.35 mg Mouse testis tissue lysate with ab314229 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab314229 at 1/1000 dilution. VeriBlot for IP secondary antibody(HRP) (ab131366) was used at 1/5000 dilution. Lane 1: Mouse testis tissue lysate Lane 2: ab314229 IP in Mouse testis tissue lysate Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab314229 in mouse testis tissue lysate Blocking and dilution buffer and concentration: 5% NFDM/TBST.
All lanes:
Immunoprecipitation - Anti-Nectin 2 antibody [EPR28277-22] (ab314229) at 1/30 dilution

All lanes:
Mouse testis tissue lysate

Secondary

All lanes:
Immunoprecipitation - VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/5000 dilution

Exposure time: 180s



Western blot - Anti-Nectin 2 antibody [EPR28277-22] - BSA and Azide free (ab314230)

This data was developed using ab314229, the same antibody clone in a different buffer formulation. Blocking and diluting buffer and concentration: 5% NFDM/TBST Low expression: ovary, breast(PMID: 23758976) In Western blot, Anti-GAPDH antibody [EPR16891] - Loading Control (ab181602) staining at 1/200000 dilution.
All lanes:
Western blot - Anti-Nectin 2 antibody [EPR28277-22] (ab314229) at 1/1000 dilution

Lane 1:
NIH/3T3 (mouse embryonic fibroblast) whole cell lysate at 20 µg

Lane 2:
Mouse testis tissue lysate at 20 µg

Lane 3:
Mouse ovary tissue lysate at 20 µg

Lane 4:
Mouse breast tissue lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Observed band size: 70 kDa, 80 kDa

Exposure time: 180s

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