abcam

ab283328

Anti-PVRL1/NECTIN1 antibody [EPR24275-102] - 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	EPR24275-102
Purification technique	Affinity purification Protein A
Concentration	0.997 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	-

Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

WB

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information NECTIN1

Function	Cell adhesion molecule that promotes cell-cell contacts and plays important roles in the development of the nervous system (PubMed:21325282). Acts by forming

homophilic or heterophilic trans-dimers (PubMed:21325282). Heterophilic interactions have been detected between NECTIN1 and NECTIN3 and between NECTIN1 and NECTIN4 (By similarity). Involved in axon guidance by promoting contacts between the commissural axons and the floor plate cells (By similarity). Involved in synaptogegesis (By similarity). Has some neurite outgrowth-promoting activity (By similarity). Promotes formation of checkerboard-like cellular pattern of hair cells and supporting cells in the auditory epithelium via heterophilic interaction with NECTIN3: NECTIN1 is present in the membrane of hair cells and associates with NECTIN3 on supporting cells, thereby mediating heterotypic adhesion between these two cell types (By similarity). Required for enamel mineralization (By similarity). (Microbial infection) Acts as a receptor for herpes simplex virus 1/HHV-1, herpes simplex virus 2/HHV-2, and pseudorabies virus/PRV (PubMed:21980294, PubMed:25231300, PubMed:28381567, PubMed:28542478, PubMed:34587223, PubMed:38857290, PubMed:39048823, PubMed:39048830, PubMed:7721102, PubMed:9616127, PubMed:9657005). Constitutes the major receptor for herpes simplex virus 1/HHV-1 entry into host cells (PubMed:34587223).

Storage

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

Notes

ab283328 is the carrier-free version of ab283310.

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	The protein PVRL1 also known as NECTIN1 or nectin-1 functions mechanically as an immunoglobulin-like cell adhesion molecule. It plays a role in creating adherens junctions between cells operating as both a homophilic and heterophilic binding partner. Nectin-1 has a molecular mass of approximately 97 kDa. It is expressed prominently in epithelial tissues and particularly in the nervous system which suggests it plays an important role in cell-cell communication in these areas.
Biological function summary	Nectin-1 facilitates cellular processes through its involvement in cell adhesion complexes. It functions as part of a larger complex including proteins like afadin which links to the actin cytoskeleton and promotes cell junction integrity. This organization impacts cellular adhesion migration and proliferation. Nectin-1's adhesive functions are fundamental in maintaining structural tissues and transmitting signals within cells a necessity for development and tissue maintenance.
Pathways	Nectin-1 contributes to the activation of the MAPK/ERK signaling pathway central to regulating various cell functions including proliferation and differentiation. It also participates in the cadherin-catenin complex pathway working in conjunction with E-cadherin a critical protein in maintaining epithelial cell layer integrity. These pathways highlight nectin-1’s role as a signal transducer affecting how cells interact and react to their environment.
Associated diseases and disorders	Nectin-1 is implicated in cleft lip and palate disorder. Mutations affecting nectin-1 can disrupt cell adhesion processes necessary for proper development of facial structures. Furthermore alterations in nectin-1 gene expression are associated with susceptibility to herpes simplex virus infections as nectin-1 acts as a viral entry receptor. In these conditions its interaction with closely related membrane proteins such as nectin-3 is significant in disease manifestation 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.

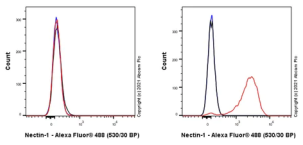
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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.

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1 product image



Flow Cytometry - Anti-PVRL1/NECTIN1 antibody [EPR24275-102] - BSA and Azide free (ab283328)

PVRL1/NECTIN1 Flow Cytometry staining using rabbit Anti-PVRL1/NECTIN1 antibody

This data was developed using ab283310, the same antibody clone in a different buffer formulation.
Flow cytometric analysis of K-562(Human chronic myelogenous leukemia lymphoblast, Left)/ HaCaT (human skin keratinocyte, Right) cells labelling PVRL1/NECTIN1 with ab283310 at 1/500 dilution (0.1ug) (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, ab150077) at 1/2000 dilution was used as the secondary antibody. Gated on viable cells.

Negative control: K-562 (PMID: 30759143).

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