abcam

ab234128

Anti-PVRL1/NECTIN1 antibody [R1.302]

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	pH: 7.4 Preservative: 0.0975% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Cell preparation containing NECTIN1 protein. The exact immunogen used to generate this antibody is proprietary information. Database link Q15223
Clone number	R1.302
Purification technique	Affinity purification Protein A
Purification notes	Purity > 95% (by SDS-PAGE).

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1-4 µg/mL
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 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	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

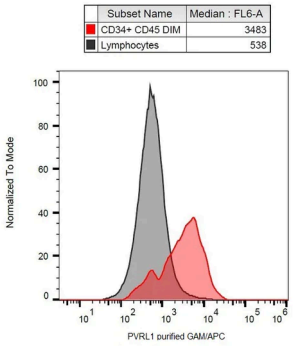
We do not recommend this combination. It is not covered by our product promise.

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.

1 product image



Flow Cytometry - Anti-PVRL1/NECTIN1 antibody [R1.302] (ab234128)

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

Flow cytometric analysis of human peripheral blood labeling PVRL1/NECTIN1 with ab234128, followed by Goat-anti Mouse APC.

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