abcam

ab314064

Anti-PVR/CD155 antibody [BLR074G] - BSA free

Recombinant

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.8 - 8.6 Preservative: 0.09% Sodium azide Constituents: 98% Borate buffered saline
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Fragment Protein within Human PVR aa 1 to C-terminus. The exact immunogen used to generate this antibody is proprietary information. Database link P15151
Clone number	BLR074G

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	-
Notes	-

ICC

Tested

Species	Human
Dilution info	-
Notes	-

IHC-P

Tested

Species	Human
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Target data

See full target information PVR

Function

Mediates NK cell adhesion and triggers NK cell effector functions. Binds two different NK cell receptors: CD96 and CD226. These interactions accumulates at the cell-cell contact site, leading to the formation of a mature immunological synapse between NK cell and target cell. This may trigger adhesion and secretion of lytic granules and IFN-gamma and activate cytotoxicity of activated NK cells. May also promote NK cell-target cell modular exchange, and PVR transfer to the NK cell. This transfer is more important in some tumor cells expressing a lot of PVR, and may trigger fratricide NK cell activation, providing tumors with a mechanism of immunoevasion. Plays a role in mediating tumor cell invasion and migration. (Microbial infection) Acts as a receptor for poliovirus. May play a role in axonal transport of poliovirus, by targeting virion-PVR-containing endocytic vesicles to the microtubular network through interaction with DYNLT1. This interaction would drive the virus-containing vesicle to the axonal retrograde transport. (Microbial infection) Acts as a receptor for Pseudorabies virus. (Microbial infection) Is prevented to reach cell surface upon infection by Human cytomegalovirus /HHV-5, presumably to escape immune recognition of infected cell by NK cells.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	Up to 12 months
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C

Notes

REACH authorisation
Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of products that contain European Authorisation list (Annex XIV) substances.
It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.

Supplementary info

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

Activity summary	The Poliovirus Receptor (PVR) also known as CD155 is a cell surface glycoprotein with a molecular mass of approximately 70 kDa. This receptor is expressed on a variety of cell types including epithelial and endothelial cells immune cells and fibroblasts. Another name for PVR is Necl-5 which falls under the nectin-like molecule family. It acts as an adhesion molecule and contributes to cellular signaling and junctional complexes. The expression of PVR is widespread across multiple tissues but it exhibits stronger expression in areas such as the skin and the gastrointestinal tract.
Biological function summary	The Poliovirus Receptor plays meaningful roles in immune response modulation and cell-cell adhesion. PVR interacts with components of the immune system and forms complexes with other proteins like CD226 and TIGIT. These interactions help regulate immune cell activities especially in the context of natural killer (NK) cells and T-cells. The CD155 protein also links to migration and proliferation processes which are essential for tissue formation and repair.
Pathways	PVR is involved in the regulation of immune and signaling pathways. It fits into pathways like NK cell activation and T-cell inhibitory signaling which are important for maintaining immune tolerance and preventing autoimmunity. In these pathways PVR interacts closely with other immunoregulatory proteins including CD226 and TIGIT. The partnership of PVR with these proteins shapes the delicate balance between immune activation and suppression demonstrating a clear role in immune homeostasis.

Associated diseases and disorders	PVR relates to conditions such as cancer and viral infection. Its overexpression or altered signaling has been observed in several cancers where it may contribute to tumor growth and immune evasion. The interaction between PVR and its related protein TIGIT can affect antitumor immune responses complicating cancer progression. Additionally as its name suggests PVR binds to the poliovirus facilitating viral entry and spread during infection. This highlights the importance of PVR not only in pathogenic interactions but also in broader immune response contexts.

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

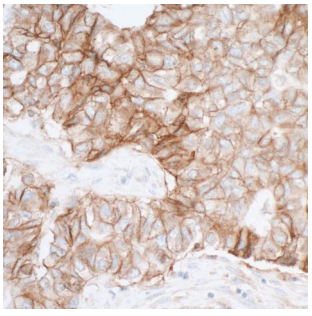
We do not recommend this combination. It is not covered by our product promise.

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.

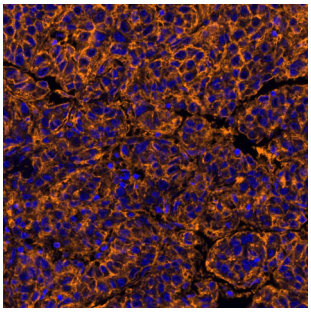
Full details and terms and conditions can be found here:
Terms & Conditions.

5 product images



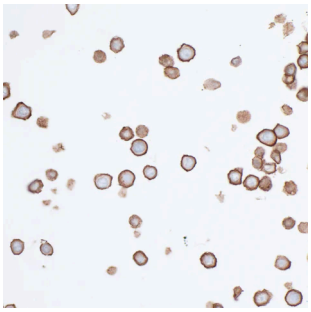
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PVR/CD155 antibody [BLR074G] - BSA free (ab314064)

Detection of human PVR/CD155 by immunohistochemistry. Sample:FFPE section of lung carcinoma. Antibody:Rabbit anti-PVR/CD155 recombinant monoclonal antibody [BLR074G] (A700-074 lot 1) used at 1:100. Secondary:HRP-conjugated goat anti-rabbit IgG (A120-501P). Substrate:DAB.



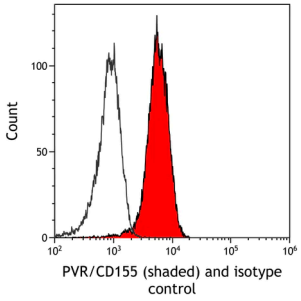
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PVR/CD155 antibody [BLR074G] - BSA free (ab314064)

Detection of human PVR/CD155 in FFPE hepatic carcinoma by IHC-IF. Antibody:Rabbit anti-PVR/CD155 recombinant monoclonal antibody [BLR074G] (A700-074 Lot 1). Secondary: HRP-conjugated goat anti-rabbit IgG (A120-501P). Substrate:Opal™. Counterstain: DAPI.



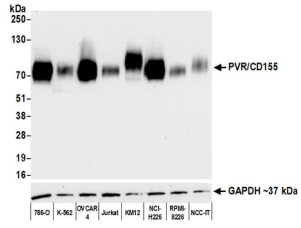
Immunocytochemistry - Anti-PVR/CD155 antibody [BLR074G] - BSA free (ab314064)

Detection of human PVR/CD155 by immunocytochemistry Sample:FFPE section of HT29 cells. Antibody:Rabbit anti-PVR/CD155 recombinant monoclonal antibody [BLR074G] used at 1:100. Secondary: HRP-conjugated goat anti-rabbit IgG Substrate:DAB.



Flow Cytometry - Anti-PVR/CD155 antibody [BLR074G] - BSA free (ab314064)

Detection of human PVR/CD155 (shaded) in Jurkat cells by flow cytometry. Antibody:Rabbit anti-PVR/CD155 recombinant monoclonal antibody [BLR074G] (A700-074) or isotype control (unshaded). Secondary:DyLight® 488conjugated goat anti-rabbit IgG (A120-101D2).



Western blot - Anti-PVR/CD155 antibody [BLR074G] - BSA free (ab314064)

Samples:Whole cell lysate (10 µg) from 786-O, K-562, OVCAR-4, Jurkat, KM12, NCI-H226, RPMI-8226, and NCCIT cells prepared using NETN lysis buffer. Antibody:Rabbit anti-PVR/CD155 recombinant monoclonal antibody [BLR074G] (A700-074 lot 1) used at 1:1000. Secondary: HRP-conjugated goat anti-rabbit IgG (A120-101P). Chemiluminescence with an exposure time of 10 seconds. Lower Panel: Rabbit anti-GAPDH (A300-639A).
All lanes:
Western blot - Anti-PVR/CD155 antibody [BLR074G] - BSA free (ab314064) at 1/1000 dilution

Lane 1:
786-O Whole cell lysate at 10 µg

Lane 2:
K-562 Whole cell lysate at 10 µg

Lane 3:
OVCAR-4 Whole cell lysate at 10 µg

Lane 4:
Jurkat Whole cell lysate at 10 µg

Lane 5:
KM12 Whole cell lysate at 10 µg

Lane 6:
NCI-H226 Whole cell lysate at 10 µg

Lane 7:
RPMI-8226 Whole cell lysate at 10 µg

Lane 8:
NCCIT Whole cell lysate at 10 µg

Secondary

All lanes:
HRP-conjugated goat anti-rabbit IgG

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