abcam

ab243891

Anti-VISTA antibody [BLR035F]

Recombinant | KO Validated

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.8 - 8.6 Preservative: 0.09% Sodium azide Constituents: 98% Borate buffered saline, 0.1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	Synthetic Peptide within Human VSIR aa 250 to C-terminus. The exact immunogen used to generate this antibody is proprietary information. Database link Q9H7M9
Clone number	BLR035F
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Recombinant antibody was purified from cell culture supernatant.

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	1/100 - 1/500

Notes	Perform heat-mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

ICC

Tested

Species	Human
Dilution info	1/100 - 1/500
Notes	-

IP

Tested

Species	Human
Dilution info	-
Notes	Use 20µl/mg lysate.

Flow Cyt

Expected

Species	Human
Dilution info	2 µL for 10^6 Cells
Notes	-

WB

Tested

Species	Human
Dilution info	1/1000
Notes	-

Target data

See full target information VSIR

Function	Immunoregulatory receptor which inhibits the T-cell response (PubMed:24691993). May promote differentiation of embryonic stem cells, by inhibiting BMP4 signaling (By similarity). May stimulate MMP14-mediated MMP2 activation (PubMed:20666777).

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	+4°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

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.

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Supplementary info

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

Activity summary	VISTA also known as V-domain Ig suppressor of T cell activation or Gi24 is a protein significant in immune regulation. It is a type I transmembrane glycoprotein with an apparent mass of approximately 55 kDa. VISTA is expressed on hematopoietic cells specifically within immune system components such as myeloid cells and T cells. Researchers have identified biotinylated chimeric proteins which facilitate the study of VISTA's expression and interactions in various immunological research models.
Biological function summary	VISTA functions in immune checkpoint regulation by modulating T cell activity. It acts as both a ligand and a receptor influencing immune responses. As part of an immune complex VISTA interacts with other checkpoint proteins to maintain

	immune homeostasis and prevent autoimmunity. Its role mirrors those of other B7 family members like PD-1 and CTLA-4 which are involved in negative immune regulation.
Pathways	VISTA integrates into the broader framework of immune signaling pathways. It contributes significantly to the immune checkpoint pathway similar to CTLA-4 and PD-1 which mediate immune cell proliferation and activation. By interacting with these proteins VISTA plays an important role in maintaining self-tolerance and regulating inflammatory responses functioning parallel to other proteins such as CD28 and B7-H5 in the immune checkpoint pathway.
Associated diseases and disorders	VISTA's improper regulation associates with autoimmune diseases and cancer. Its expression influences the progression of conditions like rheumatoid arthritis where it modulates immune responses and inflammation. Additionally in oncology VISTA acts as an inhibitory molecule; hence targeting it can enhance anti-tumor immunity similar to therapies targeting proteins like PD-1 and PD-L1. Understanding VISTA's intricate connections helps in developing therapies for these diseases.

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

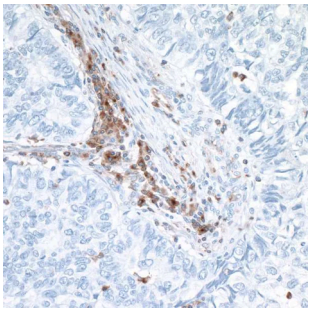
We do not recommend this combination. It is not covered by our product promise.

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.

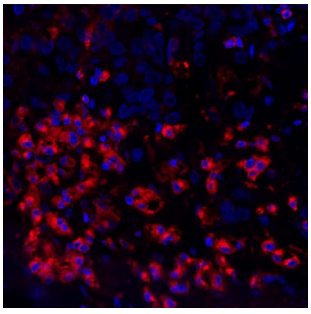
6 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-VISTA antibody [BLR035F] (ab243891)

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

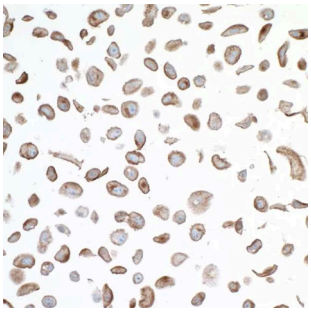
Formalin-fixed, paraffin-embedded human lung carcinoma tissue stained for VISTA using ab243891 at 1/250 dilution in immunohistochemical analysis. A HRP-conjugated goat anti-rabbit antibody was used as the secondary. DAB staining.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-VISTA antibody [BLR035F] (ab243891)

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

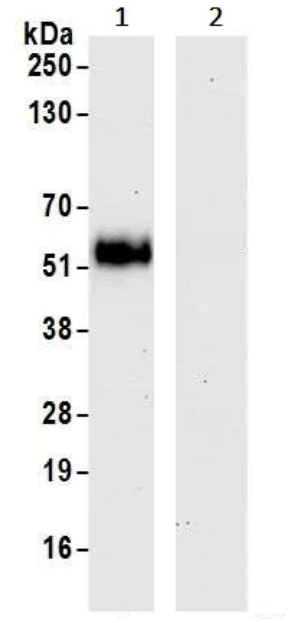
Immunohistochemistry analysis of formalin-fixed, paraffin-embedded human ovarian carcinoma tissue labeling VISTA with ab243891 at a 1/250 dilution, followed by HRP-conjugated Goat Anti-Rabit IgG secondary antibody. Substrate: Opal. Counterstain: DAPI (blue).



Immunocytochemistry - Anti-VISTA antibody [BLR035F] (ab243891)

VISTA Immunocytochemistry staining using rabbit Anti-VISTA antibody

Formalin-fixed, paraffin-embedded NCI H226 cells labeling VISTA using ab243891 at 1/250 dilution in ICC analysis. A HRP-conjugated goat-anti rabbit IgG was used as the secondary. DAB staining.



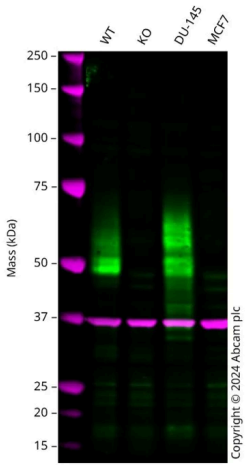
Immunoprecipitation - Anti-VISTA antibody [BLR035F] (ab243891)

VISTA was immunoprecipitated from 1.0 mg Jurkat (human T cell leukemia cell line from peripheral blood) whole cell lysate with ab243891 at 20 µl per reaction. Western blot was performed on the immunoprecipitate using ab243891 at 1/1000 dilution. Lane 1: ab243891 IP in Jurkat whole cell lysate.
Lane 2: Contol IgG in Jurkat whole cell lysate.

Detection: Chemiluminescence with an exposure time of 30 seconds.

All lanes:
Immunoprecipitation - Anti-VISTA antibody [BLR035F] (ab243891)

Predicted band size: 34 kDa



Western blot - Anti-VISTA antibody [BLR035F] (ab243891)

VISTA Western blot staining using rabbit Anti-VISTA antibody

Western blot: Anti-VSIR antibody [BLR035F] (ab243891) staining at 1/1000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] (ab8245) loading control staining at 1/20000 dilution, shown in magenta. In Western blot, ab243891 was shown to bind specifically to VSIR. A band was observed at 50-60 kDa in wild-type A549 cell lysates with no signal observed at this size in VSIR knockout cell line. To generate this image, wild-type and VSIR knockout A549 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution.
All lanes:
Western blot - Anti-VISTA antibody [BLR035F] (ab243891) at 1/1000 dilution

Lane 1:
Wild-type A549 cell lysate at 20 µg

Lane 2:
VSIR knockout A549 cell lysate at 20 µg

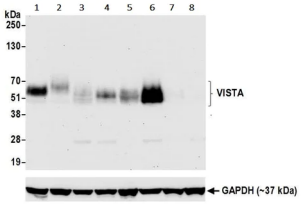
Lane 3:
DU 145 cell lysate at 20 µg

Lane 4:
MCF7 cell lysate at 20 µg

Secondary

All lanes:
Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution

Performed under reducing conditions.



Western blot - Anti-VISTA antibody [BLR035F] (ab243891)

VISTA Western blot staining using rabbit Anti-VISTA antibody

Western blot analysis using ab243891 at 1/1000 dilution.
Lane 1: Jurkat whole cell lysate (50 µg).

Lane 2: MOLT-4 whole cell lysate (50 µg).

Lane 3: MJ whole cell lysate (50 µg).

Lane 4: RPMI 8226 whole cell lysate (50 µg).

Lane 5: HeLa whole cell lysate (50 µg).

Lane 6: KG-1 whole cell lysate (50 µg).

Lane 7: HEK-293T whole cell lysate (50 µg).

Lane 8: SUP-M2 whole cell lysate (50 µg).

A HRP-conjugated goat anti-rabbit IgG antibody was used as the secondary. Detection: chemiluminescence with an exposure time of 30 seconds.

All lanes:
Western blot - Anti-VISTA antibody [BLR035F] (ab243891)

Predicted band size: 34 kDa

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