abcam

ab275386

Anti-HHLA2 antibody [EPR23563-120] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR23563-120
Purification technique	Affinity purification Protein A

Reactivity data

ICC/IF

Not recommended

Species	Human
Dilution info	-
Notes	-

IP

Not recommended

Species	Human
Dilution info	-
Notes	-

Flow Cyt

Tested

Species	Human
Dilution info	-
Notes	-

WB

Not recommended

Species	Human
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human
Dilution info	-
Notes	-

Target data

See full target information HHLA2

Function	Through interaction with TMIGD2, costimulates T-cells in the context of TCR-mediated activation. Enhances T-cell proliferation and cytokine production via an AKT-dependent signaling cascade.

Storage

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

Notes

ab275386 is the carrier-free version of ab254367.

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 HHLA2 protein also known as Human endogenous retrovirus-H Long Terminal Repeat-Associating 2 plays a role in the immune response. This protein is part of the B7 family which are known for their involvement in immunomodulation. It has a molecular weight of approximately 30 kDa. HHLA2 is expressed in various tissues including the placenta kidneys intestines and lungs. Additionally HHLA2 is typically

	upregulated in some cancer tissues which suggests a potential role in tumor immunity.
Biological function summary	HHLA2 acts as a co-inhibitory molecule that modulates T cell activity functioning to suppress T cell proliferation and cytokine production. It engages in the immune checkpoint pathways which are critical for maintaining immune tolerance and preventing over-activation of the immune system. HHLA2 does not act alone but rather interacts with other B7 family proteins in these pathways. It influences CTLA-4 and PD-1 mediated pathways by modulating the immune checkpoints adjusting the immune response based on physiological needs.
Pathways	HHLA2 fits into the immune checkpoint regulation pathways. It is known to modulate the PD-1/PD-L1 pathway which is essential for T cell immune evasion in cancer cells. Through its interactions HHLA2 can impact the tumor microenvironment by influencing immune cell infiltration and activation which is a significant aspect of cancer progression and immune evasion strategies. It is also related to CTLA-4 regulatory pathways which play an important role in maintaining immune homeostasis by negatively regulating T cell activation.
Associated diseases and disorders	HHLA2 associates with cancer particularly certain solid tumors where its expression is increased suggesting its role in immune evasion. This association points to its potential as a therapeutic target for immunotherapy. HHLA2 is connected to proteins like PD-L1 and CTLA-4 which are already known targets in cancer therapy because of their roles in bypassing immune detection by tumors. Additionally its expression is linked to autoimmune diseases where dysregulation of immune checkpoints results in excessive immune cell activity against self-tissues.

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

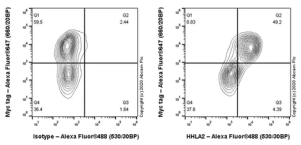
We do not recommend this combination. It is not covered by our product promise.

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.

2 product images



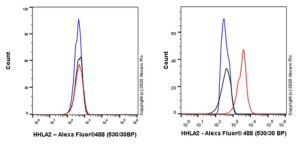
Flow Cytometry - Anti-HHLA2 antibody [EPR23563-120] - BSA and Azide free (ab275386)

HHLA2 Flow Cytometry staining using rabbit Anti-HHLA2 antibody

This data was developed using ab254367, the same antibody clone in a different buffer formulation.
Flow cytometric analysis of 2% paraformaldehyde fixed, 0.1% Tween-20 permeabilized HEK-293T (Human embryonic kidney epithelial cell line) cells transfected with Myc-His tagged HHLA2 overexpression vector labelling HHLA2 with ab254367 at 1/500 dilution (Right) compared with a Rabbit monoclonal IgG (ab172730) isotype control (Left).

A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/2000 dilution was used as the secondary antibody.

Cells were surface stained with rabbit IgG or ab254367. Then fixed with 2% PFA for 10min followed by intracellularly stained with anti-myc tag conjugated to Alexa Fluor®647.



Flow Cytometry - Anti-HHLA2 antibody [EPR23563-120] - BSA and Azide free (ab275386)

HHLA2 Flow Cytometry staining using rabbit Anti-HHLA2 antibody

This data was developed using ab254367, the same antibody clone in a different buffer formulation.
Flow cytometric analysis of HeLa (human cervix adenocarcinoma epithelial cell line, left) / A-204 (human muscle rhabdomyosarcoma, right) cells labelling HHLA2 with ab254367 at 1/500 dilution (Red) compared with a Rabbit monoclonal IgG (ab172730) isotype control (Black) 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.

Negative control: Hela (PMID:23716685).

Gated on viable cells.

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