abcam

ab313612

Anti-LILRB5 antibody [EPR23896-84]

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR23896-84
Purification technique	Affinity purification Protein A
Concentration	0.51 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Human
Dilution info	1/1000
Notes	-

Species	Transfected cell lysate - Human

Dilution info	1/1000
Notes	-

Not recommended

Species	Mouse, Rat, Transfected cell line - Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/50 - 1/500
Notes	-

Species	Transfected cell line - Human
Dilution info	1/500
Notes	-

Not recommended

Species	Mouse, Rat, Transfected cell lysate - Human
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human, Mouse, Rat, Transfected cell lysate - Human, Transfected cell line - Human
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Transfected cell line - Human
Dilution info	1/2000
Notes	-

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Mouse, Rat, Transfected cell lysate - Human
Dilution info	-
Notes	-

Target data

See full target information LILRB5

Function	May act as receptor for class I MHC antigens.

Storage

Shipped at conditions	Conditional Ambient
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

Notes

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.

Supplementary info

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

Activity summary	The LILRB5 protein also known as Leukocyte Immunoglobulin-Like Receptor Subfamily B Member 5 has an approximate mass of 65 kDa. It belongs to the immunoglobulin superfamily and is primarily found on the surface of several immune cells including monocytes and macrophages. LILRB5 plays a significant role in down-modulating immune responses by interacting with its ligands.
Biological function summary	This protein functions as an inhibitory receptor that modulates immune cell activation and responses. It is not part of a larger protein complex but works individually to regulate anti-inflammatory signaling pathways. Its activity helps maintain immune homeostasis and prevents overactivation of immune responses which can lead to tissue damage.
Pathways	LILRB5 acts within the context of immune response regulation. It is involved in pathways related to immunosuppressive signaling notably the PD-1 receptor pathway. LILRB5 interacts with other immune-regulating proteins like LILRB1 and PD-L1 which coordinate to control immune checkpoint signaling suppressing excessive immune reactions.
Associated diseases and disorders	LILRB5 has connections to autoimmune diseases and cancer. Its role in suppressing immune responses links it to autoimmune conditions where inappropriate targeting of self-tissues occurs suggesting that its dysregulation may lead to such disorders. Furthermore in cancer tumor cells might exploit LILRB5-mediated pathways to evade immune surveillance. Related proteins like LILRB1 and PD-L1 further complicate these pathways influencing disease progression and therapeutic outcomes.

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

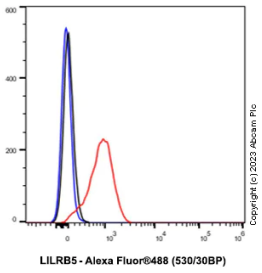
We do not recommend this combination. It is not covered by our product promise.

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.

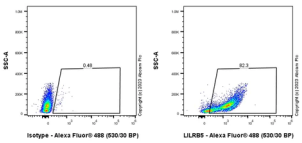
Full details and terms and conditions can be found here:
Terms & Conditions.

7 product images



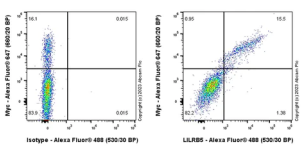
Flow Cytometry (Intracellular) - Anti-LILRB5 antibody [EPR23896-84] (ab313612)

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized No-GFP-CD16.NK-92 (CD16 ectopically expressed natural killer(NK-92Â®) cell with no GFP tag) cells labelling LILRB5 with ab313612 at 1/50 dilution (1 ug) (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). A Goat Anti-Rabbit IgG (Alexa FluorÂ® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.



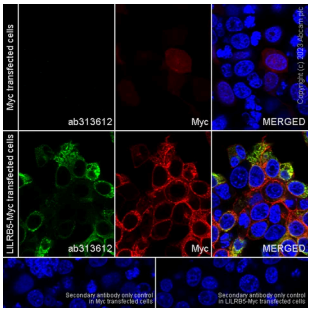
Flow Cytometry (Intracellular) - Anti-LILRB5 antibody [EPR23896-84] (ab313612)

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized human PBMC (human peripheral blood mononuclear cell) cells labelling LILRB5 with ab313612 at 1/500 dilution (0.1 ug)/Right (Red) compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat Anti-Rabbit IgG (Alexa FluorÂ® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.



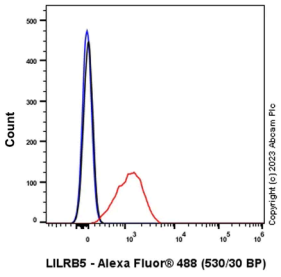
Flow Cytometry (Intracellular) - Anti-LILRB5 antibody [EPR23896-84] (ab313612)

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized Isotype (Left) / 293T cells transfected with a human LILRB5 expression vector containing a myc tag (Right) cells labelling LILRB5 with ab313612 at 1/500 dilution (0.1 ug)/Right (Red) compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat Anti-Rabbit IgG (Alexa FluorÂ® 488, ab150081) at 1/5000 dilution was used as the secondary antibody. Cells were co-stained with anti-Myc conjugated to 647.



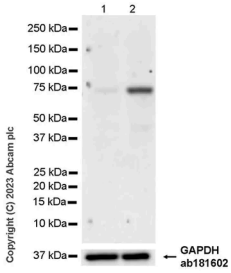
Immunocytochemistry/ Immunofluorescence - Anti-LILRB5 antibody [EPR23896-84] (ab313612)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized 293T (human embryonic kidney epithelial cell) cells labelling LILRB5 with ab313612 at 1/2000 (0.255 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 2 ug/ml dilution (Green). Confocal image showing positive staining in 293T cells transfected with a human LILRB5 expression vector containing a myc tag. Image was taken with a confocal microscope(Leica-Microsystems, TCS SP8). ab223894 Anti-Myc tag mouse monoclonal antibody (Alexa Fluor® 594) was used to counterstain tubulin at 1/100 5ug/ml dilution (Red). The Nuclear counterstain was DAPI (Blue). Secondary antibody only control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2 ug/ml dilution.



Flow Cytometry (Intracellular) - Anti-LILRB5 antibody [EPR23896-84] (ab313612)

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized HepG2 (human hepatocellular carcinoma epithelial cell) cells labelling LILRB5 with ab313612 at 1/500 dilution (0.1 ug) (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). A Goat Anti-Rabbit IgG (Alexa FluorÂ® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.



Western blot - Anti-LILRB5 antibody [EPR23896-84] (ab313612)

Blocking and diluting buffer and concentration: 5% NFDM/TBST Low expression: 293T. In Western blot, anti-GAPDH antibody (ab181602) loading control staining at 1/200000 dilution. Exposure time: 114 seconds
All lanes:
Western blot - Anti-LILRB5 antibody [EPR23896-84] (ab313612) at 1/1000 dilution

Lane 1:
293T (human embryonic kidney epithelial cell) whole cell lysate at 60 µg

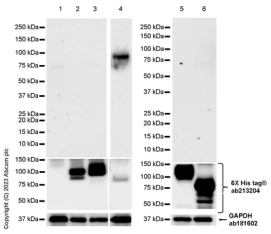
Lane 2:
No-GFP-CD16.NK-92 (CD16 ectopically expressed natural killer(NK-92®) cell with no GFP tag) whole cell lysate at 60 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Observed band size: 80 kDa

Exposure time: 114s



Western blot - Anti-LILRB5 antibody [EPR23896-84] (ab313612)

Blocking and diluting buffer and concentration: 5% NFDM/TBST This antibody does not cross-react with human LILRB1, LILRB2, LILRB3, and LILRB4. In Western blot, anti-His antibody (ab213204) staining at 1/5000 dilution. In Western blot, anti-GAPDH antibody (ab181602) loading control staining at 1/200000 dilution. Exposure time: 103 seconds
All lanes:
Western blot - Anti-LILRB5 antibody [EPR23896-84] (ab313612) at 1/1000 dilution

Lane 1:
293T cells transfected with an empty vector containing a His-tag whole cell lysate at 60 µg

Lane 2:
293T cells transfected with a human LILRB3 expression vector containing a His-tag whole cell lysate at 10 µg

Lane 3:
293T cells transfected with a human LILRB1 expression vector containing a His-tag whole cell lysate at 5 µg

Lane 4:
293T cells transfected with a human LILRB5 expression vector containing a His-tag whole cell lysate at 60 µg

Lane 5:
293T cells transfected with a human LILRB2 expression vector containing a His-tag whole cell lysate at 20 µg

Lane 6:
293T cells transfected with a human LILRB4 expression vector containing a His-tag whole cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Observed band size: 80 kDa

Exposure time: 103s

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