abcam

ab290731

Anti-ULBP2+ULBP5+ULBP6 antibody [EPR26171-156]

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	EPR26171-156
Purification technique	Affinity purification Protein A
Concentration	0.538 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human
Dilution info	-
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Mouse
Dilution info	-
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Rat
Dilution info	-
Notes	-

Flow Cyt

Tested

Species	Human
Dilution info	1/500
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/500

Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

IP

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

Not recommended

Species	Rat, Mouse, Human
Dilution info	-
Notes	-

Target data

See full target information RAET1L

Function	Binds and activates the KLRK1/NKG2D receptor, mediating natural killer cell cytotoxicity.

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	ULBP2 also known as UL16-binding protein 2 and N2DL2 is a glycoprotein with a mass of approximately 30 kDa. It belongs to the family of NKG2D ligands and plays an essential role in the immune response. This protein is expressed on the surface of a variety of cells including epithelial cells fibroblasts and activated immune cells. Its expression can be induced by cellular stress infection or transformation making it an important player in the regulation of the immune system.
Biological function summary	The function of ULBP2 is to facilitate the activation of natural killer (NK) cells and cytotoxic T lymphocytes through binding to the NKG2D receptor. ULBP2 is not a part of a complex but acts independently to trigger immune responses. By interacting with NKG2D ULBP2 promotes the release of cytokines and enhances the cytolytic activity of these immune cells leading to the destruction of infected or transformed cells. This mechanism allows the immune system to efficiently target and eliminate compromised cells.
Pathways	The interaction between ULBP2 and the NKG2D receptor forms a critical part of the immune surveillance pathway. This pathway detects and responds to cellular abnormalities such as tumorigenesis or viral infections. ULBP2's activity relates closely with other NKG2D ligands and components of the immune checkpoint pathways notably involving proteins like MICA and MICB. Additionally ULBP2’s

interaction impacts the balance between activating and inhibitory signals within the NK cell cascade thereby influencing immune system homeostasis.

Associated diseases and disorders

ULBP2 expression has significant implications in cancer and autoimmune conditions. Elevated levels of ULBP2 are frequently associated with various types of cancer where they can either stimulate anti-tumor immunity or be shed to evade immune detection. In this context the protein interacts with NKG2D which is also expressed on tumor-infiltrating lymphocytes. Additionally altered expression of ULBP2 has been observed in inflammatory disorders potentially contributing to tissue damage due to sustained immune activation. Understanding these interactions is important for developing therapeutic strategies targeting ULBP2-related pathways.

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

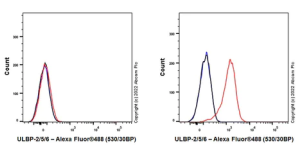
We do not recommend this combination. It is not covered by our product promise.

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.

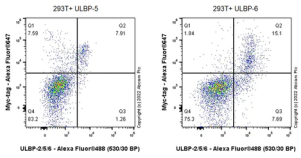
3 product images



Flow Cytometry - Anti-ULBP2+ULBP5+ULBP6 antibody [EPR26171-156] (ab290731)

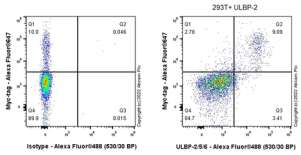
ULBP2+ULBP5+ULBP6 Flow Cytometry staining of Raji (Human Burkitt's lymphoma B lymphocyte, Left) / BxPC-3 (Human pancreas adenocarcinoma epithelial cell, Right) using rabbit Anti-ULBP2+ULBP5+ULBP6 antibody

Flow cytometric analysis of Raji (Human Burkitt's lymphoma B lymphocyte, Left) / BxPC-3 (Human pancreas adenocarcinoma epithelial cell, Right) cells labelling ULBP2+ULBP5+ULBP6 with ab290731 at 1/500 dilution (0.1ug) (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). Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/2000 dilution was used as the secondary antibody. Negative control: Raji.Gated on viable cells.



Flow Cytometry (Intracellular) - Anti-ULBP2+ULBP5+ULBP6 antibody [EPR26171-156] (ab290731)

Flow cytometric analysis of 2% paraformaldehyde fixed 0.1% Tween-20 permeabilized HEK-293T (Human embryonic kidney epithelial cell) transfected with human ULBP-5 (Left) and ULBP-6 (Right) expression vector cells labelling ULBP2+ULBP5+ULBP6 with ab290731 at 1/500 dilution (0.1ug)/ Left and Right (Red) compared with a isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/2000 dilution was used as the secondary antibody. Cells were surface stained with ab290731, then fixed with 2% PFA followed by intracellular staining with Myc-tag conjugated to Alexa Fluor® 647.



Flow Cytometry (Intracellular) - Anti-ULBP2+ULBP5+ULBP6 antibody [EPR26171-156] (ab290731)

Flow cytometric analysis of 2% paraformaldehyde fixed 0.1% Tween-20 permeabilized HEK-293T (Human embryonic kidney epithelial cell) transfected with a human ULBP2 expression vector cells labelling ULBP2+ULBP5+ULBP6 with ab290731 at 1/500 dilution (0.1ug)/ 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 Fluor® 488, ab150081) at 1/2000 dilution was used as the secondary antibody. Cells were surface stained with rabbit IgG or ab290731, then fixed with 2% PFA followed by intracellular staining with Myc-tag conjugated to Alexa Fluor® 647.

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