abcam

ab88645

Anti-ULBP2 antibody

Key facts

Isotype	IgG
Host species	Mouse
Storage buffer	pH: 7.4 Constituents: PBS
Form	Liquid
Clonality	Polyclonal
Immunogen	Recombinant Full Length Protein corresponding to Human ULBP2. Database link Q9BZM5
Purification technique	Affinity purification Protein A
Concentration	0.5 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	-
Notes	ab37355 - Mouse polyclonal IgG, is suitable for use as an isotype control with this antibody.

WB

Tested

Species	Human
Dilution info	1 µg/mL
Notes	-

Target data

See full target information ULBP2

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

Storage

Shipped at conditions	Blue Ice
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

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

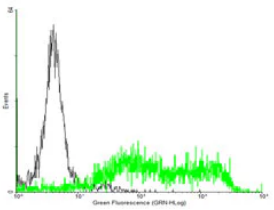
We do not recommend this combination. It is not covered by our product promise.

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.

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Terms & Conditions.

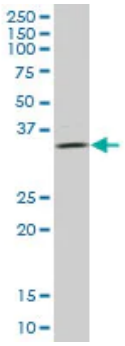
2 product images



Flow Cytometry - Anti-ULBP2 antibody (ab88645)

ULBP2 Flow Cytometry staining using mouse Anti-ULBP2 antibody

ab88645 detecting ULBP2 in ULBP2-expressing 293 cells (Green) compared with negative control 293 cells (Black) by flow cytometry.



Western blot - Anti-ULBP2 antibody (ab88645)

All lanes:
Western blot - Anti-ULBP2 antibody (ab88645) at 1 µg/mL

All lanes:
Human ovary cancer tissue lysate at 50 µg

Predicted band size: 27 kDa

Observed band size: ~35 kDa

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