abcam

ab300045

Anti-NCR1/NKp46 antibody [EPR26322-23] (BSA and Azide free)

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR26322-23
Purification technique	Affinity purification Protein A
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Mouse
Dilution info	-

Notes	-

Not recommended

Species	Human, Rat
Dilution info	-
Notes	-

WB

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

Not recommended

Species	Mouse, Human, Rat
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

IP

Not recommended

Species	Mouse, Human, Rat
Dilution info	-

Notes	-

Target data

See full target information Ncr1

Function	Cytotoxicity-activating receptor that may contribute to the increased efficiency of activated natural killer (NK) cells to mediate tumor cell lysis.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Aliquoting information	Upon delivery aliquot

Notes

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.

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.

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.

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	NCR1 also known as NKp46 is a receptor mainly expressed on the surface of natural killer (NK) cells. Its primary role involves recognizing and binding to ligands present on target cells including tumor cells and virus-infected cells. NCR1 initiates the activation of NK cells leading to the destruction of these abnormal cells. The NCR1 protein has a molecular weight of approximately 46 kDa and is a part of the immunoglobulin superfamily. NCR1 is mainly expressed in the immune system specifically on NK cells which are an important component of the innate immune response.
Biological function summary	The function of NCR1 involves the recognition of stressed transformed or infected cells marking them for elimination by NK cells. It does not typically function as a part of a complex; rather it serves a somewhat autonomous role in cell signaling. However its interaction with other receptors on NK cells including DAP12 enhances its signaling capabilities. Through the activation of cascades NCR1 promotes the release of cytotoxic granules and the production of cytokines therefore mediating the immune response.
Pathways	NCR1 plays a significant role in the regulation of immune surveillance pathways. It is involved in the recognition and elimination pathways that modulate the immune response against infected or cancerous cells. NK cells with NCR1's involvement interact with receptors like NKG2D adjusting the NK cell's cytotoxic activity. These interactions coordinate the broader immune response important for innate immunity effectively bridging innate and adaptive immunity by influencing other immune cells.
Associated diseases and disorders	NCR1 has been implicated in cancer and infectious diseases. In cancer altered expression or dysfunction of NCR1 may contribute to the evasion of immune surveillance by tumor cells potentially leading to tumor progression. Studies have shown reduced NKp46 expression in some cancerous states linking it to poor prognosis. In infectious diseases NCR1 plays a role in targeting virus-infected cells and its dysfunction can result in reduced effectiveness in clearing viral infections. Interactions with viral envelope proteins can interfere with NCR1 activity exemplifying its importance in antiviral defense mechanisms.

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.

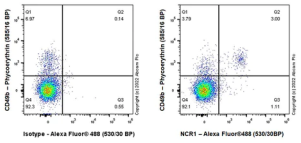
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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.

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1 product image



Flow Cytometry - Anti-NCR1/NKp46 antibody [EPR26322-23] (BSA and Azide free) (ab300045)

NCR1/NKp46 Flow Cytometry staining using rabbit Anti-NCR1/NKp46 antibody

This data was developed using ab300044, the same antibody clone in a different buffer formulation.
Flow cytometric analysis of Mouse splenocytes cells labelling NCR1 with ab300044 at 1/500 dilution (0.1µg)/ Right compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control. Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/2000 dilution was used as the secondary antibody. Cells were stained with rabbit IgG or ab300044. Then stained with anti-CD49b conjugated to PE. Gated on viable cells.

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