abcam

ab89877

Anti-NCR1/NKp46 antibody [MM0491-8F24]

Key facts

Isotype	IgG2b
Host species	Mouse
Storage buffer	Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Fragment Protein within Human NCR1. The exact immunogen used to generate this antibody is proprietary information. Database link O76036
Carrier free	Yes
Clone number	MM0491-8F24
Purification technique	Affinity purification Protein G
Concentration	0.5 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	The IgG fraction of culture supernatant was purified by Protein G affinity chromatography and sterile filtered through a 0.2 µm filter.

Reactivity data

Flow Cyt

Expected

Species	Human
Dilution info	-

Notes	ab170192 - Mouse monoclonal IgG2b, is suitable for use as an isotype control with this antibody.

WB

Expected

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

IHC-Fr

Expected

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

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