abcam

ab255696

Anti-CD96 antibody [EPR22120-174] - 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	EPR22120-174
Purification technique	Affinity purification Protein A
Concentration	1.008 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Not recommended

Species	Human
Dilution info	-

Notes	-

Flow Cyt

Tested

Species	Human
Dilution info	-
Notes	-

WB

Not recommended

Species	Human
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human
Dilution info	-
Notes	-

Target data

See full target information CD96

Function	May be involved in adhesive interactions of activated T and NK cells during the late phase of the immune response. Promotes NK cell-target adhesion by interacting with PVR present on target cells. May function at a time after T and NK cells have penetrated the endothelium using integrins and selectins, when they are actively engaging diseased cells and moving within areas of inflammation.

Storage

Shipped at conditions	Blue Ice

Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab255696 is the carrier-free version of ab224687.

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.

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.

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.

Supplementary info

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

Activity summary	CD96 also known as TACTILE is an immunoglobulin-like protein weighing approximately 65 kDa. This protein is expressed mostly on T cells and natural killer (NK) cells with its presence also noted on certain leukemic cells. CD96 functions mechanistically as an adhesion molecule mediating interaction between cells significantly involving in immune response modulation. Through binding proteins like CD155 it regulates immune cell migration and activity playing a significant role in cellular communication within the immune system.

Biological function summary	The CD96 protein contributes to the immune synapse formation by interacting with other cell surface and intracellular proteins. It is not directly part of a multiprotein complex but closely interacts with the receptor-ligand pairs within immune cell networks. It plays a role in the control of NK cell activity and helps maintain immune homeostasis by balancing activation and inhibition cues.
Pathways	The CD96 protein significantly impacts immunological pathways particularly those involving T cell and NK cell activation. It connects with pathways such as the DNAM-1 (CD226) and CD155 axis influencing immune cell recognition and response. These pathways regulate cellular activities like cytotoxicity and cytokine production where CD96 collaborates with proteins like DNAM-1 and TIGIT to fine-tune immune responses.
Associated diseases and disorders	CD96 is closely associated with cancer and autoimmune diseases. Its expression level and functional role in cell adhesion and immune response modulation affect tumor immune evasion and surveillance often serving as a potential therapeutic target in cancer immunotherapy. Moreover its interactions with CD155 and DNAM-1 suggest its involvement in autoimmune conditions where regulation of immune cell activity becomes dysregulated pointing towards its relevance in diseases like rheumatoid arthritis.

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

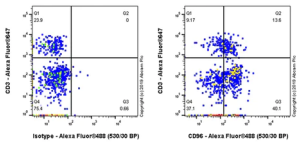
We do not recommend this combination. It is not covered by our product promise.

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.

1 product image



Flow Cytometry - Anti-CD96 antibody [EPR22120-174] - BSA and Azide free (ab255696)

CD96 Flow Cytometry staining using rabbit Anti-CD96 antibody

Flow cytometric analysis of human peripheral blood mononuclear cell (PBMC) cells labelling CD96 with ab224687 at 1/60 dilution (Right) compared with a Rabbit monoclonal IgG (ab172730) isotype control (Left).
Goat anti rabbit IgG (Alexa Fluor® 488, ab150097) at 1/5000 dilution was used as the secondary antibody.

Cells were stained with rabbit IgG (Left) or ab224687 (Right). Then stained with anti-CD3 conjugated to Alexa Fluor® 647.

Gated on viable cells.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab224687).

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