abcam

ab275586

APC Anti-CD66b antibody [04]

Anti-CD66b antibody [04] conjugated to APC - suitable for flow cytometry, and reacts with human samples. Clone [4] is a mouse monoclonal antibody.

Design your panel with our interactive flow cytometry panel builder. Click here.

Key facts

Isotype	IgG1
Host species	Mouse
Conjugation	APC
Excitation/Emission	Ex: 650nm, Em: 660nm
Storage buffer	Preservative: 0.09% Sodium azide Constituents: 0.5% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Fragment Protein within Human CEACAM8 aa 1 to C-terminus. The exact immunogen used to generate this antibody is proprietary information. Database link P31997
Clone number	04
Purification technique	Affinity purification Protein A
Concentration	0.1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	-
Notes	Use at 5 µl/Test

Target data

See full target information CEACAM8

Function	Cell surface glycoprotein that plays a role in cell adhesion in a calcium-independent manner (PubMed:11590190, PubMed:2022629, PubMed:8776764). Mediates heterophilic cell adhesion with other carcinoembryonic antigen-related cell adhesion molecules, such as CEACAM6 (PubMed:11590190, PubMed:2022629, PubMed:8776764). Heterophilic interaction with CEACAM8 occurs in activated neutrophils (PubMed:8776764).

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, Store in the dark

Supplementary info

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

Activity summary	CD66b also known as carcinoembryonic antigen-related cell adhesion molecule 8 (CEACAM8) is a glycoprotein with a molecular weight around 95 kDa. It is primarily expressed on the surface of granulocytes specifically on neutrophils—its expression on these cells makes it a useful marker in distinguishing stages of granulocyte maturation. The protein localizes to the cell membrane and serves as a cell adhesion molecule playing roles in intercellular interactions. Researchers often use CD66b-specific antibodies such as CD66b FITC for detecting and analyzing neutrophil populations commonly in flow cytometry applications.
Biological function summary	CD66b contributes to immune responses by facilitating leukocyte activation and migration during inflammation. It does not form part of a multi-protein complex but interacts with other cellular components. CD66b promotes neutrophil adhesion and transmigration to sites of infection or injury supporting their role in innate immunity. Additionally it participates in signaling pathways that influence cell survival proliferation and apoptosis in response to environmental cues.

Pathways	CD66b operates within neutrophil-related processes like the immune response and cell adhesion pathways. In the immune response pathway it collaborates with integrins to assist neutrophil extravasation through the endothelium. During inflammatory responses CD66b interaction with integrins and other adhesion molecules influences the intensity and duration of activity at inflammation sites. This interaction highlights its involvement with proteins such as ICAM-1 in mediating firm adhesion necessary for neutrophil migration.
Associated diseases and disorders	CD66b levels and activity correlate with conditions involving inflammation such as chronic obstructive pulmonary disease (COPD) and rheumatoid arthritis. During COPD the altered expression and regulation of CD66b contribute to neutrophil-driven inflammation exacerbating disease symptoms. Similarly rheumatoid arthritis involves inflammatory pathways where aberrant CD66b activity enhances synovial inflammation often linked with other inflammatory markers like TNF-alpha. Understanding CD66b's role in such diseases aids the development of therapeutic strategies targeting neutrophil-mediated pathology.

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

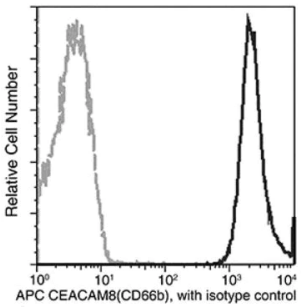
We do not recommend this combination. It is not covered by our product promise.

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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1 product image



Flow Cytometry - APC Anti-CD66b antibody [04] (ab275586)

CD66b Flow Cytometry staining using mouse Anti-CD66b antibody

Flow cytometry analysis of human peripheral blood granulocytes labeling CD66b with ab275586 (Black) compared with isotype control (Grey).

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