abcam

ab26283

Anti-pan CEACAM antibody [TET2]

Key facts

Isotype	IgG2b
Host species	Mouse
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Native Full Length Protein corresponding to Human CEACAM5. Database link P06731
Clone number	TET2
Purification technique	Affinity purification Protein G
Specificity	ab26283 is a broadly reactive antibody which reacts with most of the CEACAM molecules characterized to date (except CEACAM3, CEACAM4 and CEACAM7)4. It can be used to detect CEACAM1 (BGP/CD66a), CEACAM5 (CEA/CD66e), CEACAM6 (NCA/CD66c) and CEACAM8 (CGM6/CD66b) on transiently transfected BOSC23 cells by flow cytometry.
Concentration	2 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1 µg for 10^6 Cells

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

Target data

See full target information CEACAM5

Function	Cell surface glycoprotein that plays a role in cell adhesion, intracellular signaling and tumor progression (PubMed:10864933, PubMed:10910050, PubMed:2803308). Mediates homophilic and heterophilic cell adhesion with other carcinoembryonic antigen-related cell adhesion molecules, such as CEACAM6 (PubMed:2803308). Plays a role as an oncogene by promoting tumor progression; induces resistance to anoikis of colorectal carcinoma cells (PubMed:10910050). (Microbial infection) Receptor for E.coli Dr adhesins. Binding of E.coli Dr adhesins leads to dissociation of the homodimer.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Storage information	Avoid freeze / thaw cycle

Supplementary info

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

Activity summary	Pan CEACAM also known as Carcinoembryonic Antigen-related Cell Adhesion Molecule represents a group of glycoproteins. It carries a molecular weight varying between 60 to 90 kDa depending on the glycosylation extent. These molecules express mainly on epithelial cells especially those in the gastrointestinal tract and respiratory system. CEACAMs serve in cell-cell adhesion playing significant roles in maintaining tissue architecture and intercellular communication.
Biological function summary	These proteins participate in immunoregulation and cellular adhesion. CEACAMs function as part of larger multi-protein complexes at the cell surface interacting with numerous ligands and receptors to modulate immune responses. These proteins can inhibit or promote cellular processes such as proliferation

	differentiation and apoptosis. This way they help in maintaining normal cellular function and adaptation to environmental changes.
Pathways	Pan CEACAM proteins influence pathways related to cellular communication and immune response. They involve particularly in the JAK/STAT and MAPK pathways. CEACAMs participate in initiating or modulating cascade signaling which involves proteins like STAT3 and ERK contributing to versatile cellular responses. These pathways help fine-tune cellular proliferation and survival particularly in response to external stimuli or stress.
Associated diseases and disorders	Pan CEACAMs hold significant implications in cancer and inflammatory diseases. Elevated CEACAM expression associates with several types of cancer including colorectal and lung cancer where it affects tumor progression and metastasis. It also connects with inflammatory bowel disease contributing to an altered immune response and epithelial damage. In these conditions CEACAMs interact with other proteins such as CEACAM1 and CEACAM5 influencing disease development and progression.

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

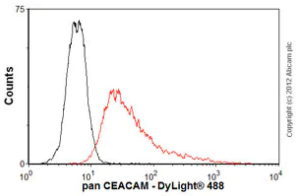
We do not recommend this combination. It is not covered by our product promise.

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 - Anti-pan CEACAM antibody [TET2] (ab26283)

Pan CEACAM Flow Cytometry staining using mouse Anti-pan CEACAM antibody

Overlay histogram showing Caco 2 cells stained with ab26283 (red line). The cells were fixed with 80% methanol (5 min) and incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab26283, 1µg/1x10^6 cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG2b [PLPV219] (ab91366, 2µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed.

Please note that Abcam do not have any data for use of this antibody on non-fixed cells. We welcome any customer feedback.

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