abcam

ab26281

Anti-CEACAM7 antibody [BAC2]

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Protein within Human CEACAM7. The exact immunogen used to generate this antibody is proprietary information. Database link Q14002
Clone number	BAC2
Purification technique	Affinity purification Protein G
Specificity	ab26281 recognizes exclusively CEACAM7 transiently expressed on the cell surface of transfected BOSC23 cells. It can be used to distinguish CEACAM7 from all other CEACAM and probably all pregnancy-specific glycoprotein molecules, namely CEACAM1 (BGP/CD66a), CEACAM3 (CGM1/CD66d), CEACAM4 (CGM7), CEACAM6 (NCA/CD66c), CEACAM7 (CGM2), CEACAM8 (CGM6/CD66b) and PSG1 (CD66f) based on its reactivity pattern with stable and transiently transfected mammalian cells expressing individual CEA family members.
Concentration	2 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Transfected cell line
Dilution info	-
Notes	-

Expected

Species	Human
Dilution info	-
Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

ELISA

Expected

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

Not recommended

Species	Transfected cell line
Dilution info	-
Notes	-

IHC-P

Expected

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

Not recommended

Species	Transfected cell line

Dilution info	-
Notes	-

IHC-Fr

Expected

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

Not recommended

Species	Transfected cell line
Dilution info	-
Notes	-

Target data

See full target information CEACAM7

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	The carcinoembryonic antigen-related cell adhesion molecule 7 (CEACAM7) also known by its gene name BAC2 is a glycosylated protein that has an approximate mass of 29 kDa. CEACAM7 belongs to the CEA family of proteins which are part of the immunoglobulin superfamily. This protein is mainly expressed on epithelial cells particularly in colon and rectum tissues as well as in normal and cancerous tissues of the colon epithelium. Expression is often downregulated in malignant transformation indicating alterations during cancer progression.
Biological function summary	The role of CEACAM7 involves cell adhesion processes and intercellular signaling. It functions as a calcium-independent cell adhesion molecule by mediating homophilic binding contributing to the maintenance of tissue architecture and stability. Although CEACAM7 does not typically form complexes with other proteins its interactions are critical for maintaining epithelial cell integrity. These interactions affect how cells communicate and can influence cell growth and differentiation.
Pathways	CEACAM7 is involved in regulating cell adhesion and immune response pathways. The protein contributes to the homophilic intercellular adhesion mediated by other members of the CEACAM family such as CEACAM1 and CEACAM6. These interactions scaffold the communication between cells affecting both adhesion and immune response mechanisms. Although the protein's role in the pathways is not as well-characterized as other family members its alteration can influence downstream effects making it an interesting target for further pathway analysis.
Associated diseases and disorders	CEACAM7 alterations have associations with colorectal cancer and inflammatory bowel disease (IBD). In colorectal cancer the downregulation of CEACAM7 correlates with tumor progression and poor prognosis whereas in IBD its expression might contribute towards the dysregulation of epithelial barriers. Through these conditions interactions with CEACAM1 and CEACAM6 signify how changes in the CEACAM family can have broader impacts on disease progression and manifestation. Understanding these interactions opens potential avenues for therapeutic intervention targeting CEACAM7 in related conditions.

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

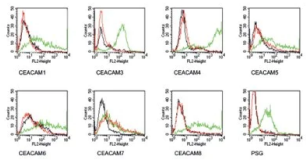
We do not recommend this combination. It is not covered by our product promise.

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-CEACAM7 antibody [BAC2] (ab26281)

CEACAM7 Flow Cytometry staining of Transfected BOSC cells using mouse Anti-CEACAM7 antibody

Members of the CEACAM family were expressed on BOSC cells after transient transfection with expression vectors containing either the cDNA of CEACAM1, 5, 6, 7, 8 or a recombinant trans-membrane-anchored PSG1 fusion protein. Recognition of CEACAM3, CEACAM4 and PSG1 was tested on stably transfected HeLa (CEACAM3, PSG) and CHO cells (CEACAM4), respectively. Expression of the constructs was confirmed.

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