BACKGROUND

Carcinoembryonic antigen (CEA) is one of the most commonly used tumor markers in serum immunoassay determinations of carcinoma. Members of the CEA family contain a single N domain, with structural homology to the immunoglobulin variable domains, followed by a variable number of immunoglobulin constant-like A and/or B domains. CEACAM7, also referred to as CEA gene-family member 2 (CGM2), is a member of the CEA family that is expressed in normal colorectal epithelia but is downregulated in colorectal cancers, suggesting that it may play a role in tumorigenesis. CEACAM7 is expressed on the apical surface of highly differentiated epithelial cells in the colorectal mucosa as well as on isolated ductal epithelial cells within the pancreas. CEACAM7 may play an important role in epithelial-microbial interactions. CD66a, a biliary glycoprotein, interacts with CEACAM7.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: CEACAM7 (human) mapping to 19q13.2.

SOURCE

CEACAM7 (BAC2) is a mouse monoclonal antibody raised against CEACAM7 of human origin.

PRODUCT

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CEACAM7 (BAC2) is available conjugated to agarose (sc-59946 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-59946HRP), 200 µg/ml, for WB, IH C(P) and ELISA; to either phycoerythrin (sc-59946 PE), fluorescein (sc-59946 FITC), Alexa Fluor® 488 (sc-59946 AF488), Alexa Fluor® 546 (sc-59946 AF546), Alexa Fluor® 594 (sc-59946 AF594) or Alexa Fluor® 647 (sc-59946 AF647), 200 µg/ml, for WB (RGB), IF, IFC and FCM; and to either Alexa Fluor® 680 (sc-59946 AF680) or Alexa Fluor® 790 (sc-59946 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

CEACAM7 (BAC2) is recommended for detection of CEACAM7 of human origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10⁶ cells); non cross-reactive with CEACAM1 (BGP/CD66a), CEACAM3 (CGM1/CD66d), CEACAM4 (CGM7), CEACAM6 (NCA/CD66c), CEACAM7 (CGM2), CEACAM8 (CGM6/CD66b) and PSG1 (CD66f).

Suitable for use as control antibody for CEACAM7 siRNA (h): sc-72073, CEACAM7 shRNA Plasmid (h): sc-72073-SH and CEACAM7 shRNA (h) Lentiviral Particles: sc-72073-V.

Molecular Weight of CEACAM7: 29 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

SELECT PRODUCT CITATIONS


STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.