

# CEACAM21 (S-13): sc-131128

## BACKGROUND

Carcinoembryonic antigen (CEA) is one of the most commonly used tumor markers in serum immunoassay determinations of carcinoma. Members of the CEACAM (carcinoembryonic antigen-related cell adhesion molecule) 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. CEACAM21 (carcinoembryonic antigen-related cell adhesion molecule 21) is a 293 amino acid single-pass type I membrane protein that belongs to the CEACAM family and contains one Ig-like C2-type domain. CEACAM21 exists as three alternatively spliced isoforms that are encoded by a gene which maps to human chromosome 19.

## REFERENCES

1. Thompson, J. and Zimmermann, W. 1988. The carcinoembryonic antigen gene family: structure, expression and evolution. *Tumour Biol.* 9: 63-83.
2. Thompson, J.A., Grunert, F. and Zimmermann, W. 1991. Carcinoembryonic antigen gene family: molecular biology and clinical perspectives. *J. Clin. Lab. Anal.* 5: 344-366.
3. Rudert, F., Saunders, A.M., Rebstock, S., Thompson, J.A. and Zimmermann, W. 1992. Characterization of murine carcinoembryonic antigen gene family members. *Mamm. Genome.* 3: 262-273.
4. Skubitz, K.M., Campbell, K.D. and Skubitz, A.P. 2001. Synthetic peptides from the N-domains of CEACAMs activate neutrophils. *J. Pept. Res.* 58: 515-526.
5. Thorp, E.B. and Gallagher, T.M. 2004. Requirements for CEACAMs and cholesterol during murine coronavirus cell entry. *J. Virol.* 78: 2682-2692.
6. Kuespert, K., Pils, S. and Hauck, C.R. 2006. CEACAMs: their role in physiology and pathophysiology. *Curr. Opin. Cell Biol.* 18: 565-571.
7. Callaghan, M.J., Rockett, K., Banner, C., Haralambous, E., Betts, H., Faust, S., Maiden, M.C., Kroll, J.S., Levin, M., Kwiatkowski, D.P. and Pollard, A.J. 2008. Haplotypic diversity in human CEACAM genes: effects on susceptibility to meningococcal disease. *Genes Immun.* 9: 30-37.

## CHROMOSOMAL LOCATION

Genetic locus: CEACAM21 (human) mapping to 19q13.2.

## SOURCE

CEACAM21 (S-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of CEACAM21 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-131128 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

CEACAM21 (S-13) is recommended for detection of All CEACAM21 1, 2 and 3 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other CEACAM family members.

Suitable for use as control antibody for CEACAM21 siRNA (h): sc-97917, CEACAM21 shRNA Plasmid (h): sc-97917-SH and CEACAM21 shRNA (h) Lentiviral Particles: sc-97917-V.

Molecular Weight of CEACAM21: 32 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **pan CEA (H-8): sc-48364**, our highly recommended monoclonal alternative to CEACAM21 (S-13).