

# CEACAM16 (A-4): sc-514335

## 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. CEACAM proteins are involved in immune responses, host/pathogen interactions and controlling tissue homeostasis. As one of several members of the CEACAM family, CEACAM16 (carcinoembryonic antigen-related cell adhesion molecule 16), also known as carcinoembryonic antigen-like 2, is a 484 amino acid single-pass transmembrane protein that contains 2 Ig-like C2-type domains.

## 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., et al. 1991. Carcinoembryonic antigen gene family: molecular biology and clinical perspectives. *J. Clin. Lab. Anal.* 5: 344-366.
3. Rudert, F., et al. 1992. Characterization of murine carcinoembryonic antigen gene family members. *Mamm. Genome* 3: 262-273.
4. Thompson, J.A. 1995. Molecular cloning and expression of carcinoembryonic antigen gene family members. *Tumour Biol.* 16: 10-16.
5. Hammarström, S. 1999. The carcinoembryonic antigen (CEA) family: structures, suggested functions and expression in normal and malignant tissues. *Semin. Cancer Biol.* 9: 67-81.
6. Zebhauser, R., et al. 2005. Identification of a novel group of evolutionarily conserved members within the rapidly diverging murine Cea family. *Genomics* 86: 566-580.

## CHROMOSOMAL LOCATION

Genetic locus: CEACAM16 (human) mapping to 19q13.32; Ceacam16 (mouse) mapping to 7 A3.

## SOURCE

CEACAM16 (A-4) is a mouse monoclonal antibody raised against amino acids 317-380 mapping near the C-terminus of CEACAM16 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CEACAM16 (A-4) is available conjugated to agarose (sc-514335 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514335 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514335 PE), fluorescein (sc-514335 FITC), Alexa Fluor® 488 (sc-514335 AF488), Alexa Fluor® 546 (sc-514335 AF546), Alexa Fluor® 594 (sc-514335 AF594) or Alexa Fluor® 647 (sc-514335 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514335 AF680) or Alexa Fluor® 790 (sc-514335 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## APPLICATIONS

CEACAM16 (A-4) is recommended for detection of CEACAM16 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

Suitable for use as control antibody for CEACAM16 siRNA (h): sc-97146, CEACAM16 siRNA (m): sc-142251, CEACAM16 shRNA Plasmid (h): sc-97146-SH, CEACAM16 shRNA Plasmid (m): sc-142251-SH, CEACAM16 shRNA (h) Lentiviral Particles: sc-97146-V and CEACAM16 shRNA (m) Lentiviral Particles: sc-142251-V.

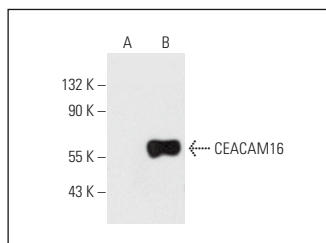
Molecular Weight of CEACAM16: 53 kDa.

Positive Controls: human CEACAM16 transfected HEK293T whole cell lysate.

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:  
 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

## DATA



CEACAM16 (A-4): sc-514335. Western blot analysis of CEACAM16 expression in non-transfected (A) and human CEACAM16 transfected (B) HEK293T whole cell lysates.

## 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) for detailed protocols and support products.