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. CEACAM1 (carcinoembryonic antigen-related cell adhesion molecule 1), also known as BGP or BGPl, is a 526 amino acid protein that exists as 7 alternatively spliced isoforms, some of which localize to the cell membranes, while others are secreted. One of several members of the CEACAM family, CEACAM1 contains one Ig-like V-type domain and three Ig-like C2-type domains and is thought to play a role in a variety of cellular activities, including angiogenesis, apoptosis, arrangement of tissue three-dimensional structure and modulation of innate and adaptive immune responses. Additionally, CEACAM1 is underexpressed in colorectal cancers, suggesting a role in tumor suppression.

REFERENCES

CHROMOSOMAL LOCATION
Genetic locus: CEACAM1 (human) mapping to 19q13.2.

SOURCE
CEACAM1 (H-136) is a rabbit polyclonal antibody raised against amino acids 391-526 mapping at the C-terminus of CEACAM1 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.

APPLICATIONS
CEACAM1 (H-136) is recommended for detection of CEACAM1 of human origin by Western Blotting (starting dilution 1:200, 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 CEACAM1 siRNA (h): sc-29845, CEACAM1 shRNA Plasmid (h): sc-29845-SH and CEACAM1 shRNA (h) Lentiviral Particles: sc-29845-V.

Molecular Weight of CEACAM1: 90-180 kDa.
Positive Controls: SW480 cell lysate: sc-2219.

RECOMMENDED SECONDARY REAGENTS
To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2110 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA

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.

MONOS Satisfaction Guaranteed
Try CEACAM1 (E-1): sc-166453 or CEACAM1 (E-10): sc-166404, our highly recommended monoclonal alternatives to CEACAM1 (H-136).