**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. CEACAMS, such as CEACAM1, CEACAM7, CD66C, CD66D and CD66E, have diverse roles within the cell, including roles in the differentiation and arrangement of tissue three-dimensional structure, angiogenesis, apoptosis, tumor suppression, metastasis and the modulation of innate and adaptive immune responses. The human CEACAM proteins are encoded by genes which are located within a 1.2 Mb cluster on the long arm of chromosome 19.

**REFERENCES**


**SOURCE**

pan CEA (H-8) is a mouse monoclonal antibody raised against amino acids 35-334 mapping near the N-terminus of CEA 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.

pan CEA (H-8) is available conjugated to agarose (sc-48364 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-48364 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-48364 PE), fluorescein (sc-48364 FITC), Alexa Fluor® 488 (sc-48364 AF488), Alexa Fluor® 546 (sc-48364 AF546), Alexa Fluor® 594 (sc-48364 AF594) or Alexa Fluor® 647 (sc-48364 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-48364 AF680) or Alexa Fluor® 790 (sc-48364 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**STORAGE**

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

**APPLICATIONS**

pan CEA (H-8) is recommended for detection of pan CEA of 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of pan CEA: 80-200 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206, COLO 320DM cell lysate: sc-2226 or T84 whole cell lysate: sc-364797.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:100000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Lumino Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG κ BP-HRP: sc-516102 with D AB , 50X: sc-24982 and Immunohismount: sc-45086, or Organo/Limonene Mount: sc-45087.

**DATA**

pan CEA (H-8): sc-48364. Western blot analysis of pan CEA expression in MCF7 whole cell lysate.

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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