

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CEACAM-7 in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 15% cross-reactivity with recombinant human (rh) CEACAM-3, rhCEACAM-8, and rhCEACAM-1 is observed and less than 2% cross-reactivity with rhCEACAM-6 and rhCEACAM-5 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human CEACAM-7 Asn37-Phe142 Accession # Q14002
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

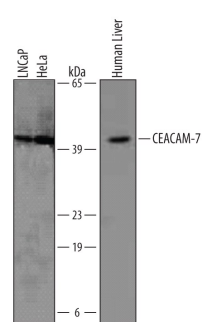
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunohistochemistry	3-15 µg/mL	See Below

DATA

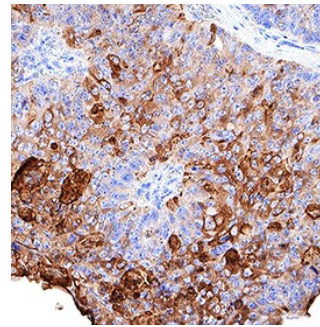
Western Blot



Detection of Human CEACAM-7 by Western Blot.

Western blot shows lysates of LNCaP human prostate cancer cell line, HeLa human cervical epithelial carcinoma cell line and human liver tissue. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human CEACAM-7 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4478) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for CEACAM-7 at approximately 45 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.

Immunohistochemistry



CEACAM-7 in Human Colon Cancer Tissue.

CEACAM-7 was detected in immersion fixed paraffin-embedded sections of human colon cancer tissue using Sheep Anti-Human CEACAM-7 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4478) at 3 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Specific staining was localized to cell surfaces of cancer cells. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

CEACAM-7 (carcinoembryonic antigen cell adhesion molecule 7; also CGM2) is a 40-45 kDa member of the CEACAM subfamily of the CEA family of proteins. It has a restricted expression pattern, being found on epithelium of the colon, appendix and pancreatic ducts. It is markedly down-regulated in colon carcinoma. Mature human CEACAM-7 is a 209 amino acid (aa), GPI-linked glycoprotein. It contains one V-type (aa 36-142) and one C2-type (aa 146-233) Ig-like domain, plus a 21 aa C-terminal propeptide. One alternate splice form exists that shows a deletion of aa 143-235. No definitive rodent CEACAM-7 has been reported.