

DESCRIPTION

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|---------------------------|---|
| Species Reactivity | Human |
| Specificity | Detects human CEACAM-4 in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant human CEACAM-1, -3, -5, -6, -7, or -8 is observed. |
| Source | Monoclonal Mouse IgG ₁ Clone # 568410 |
| Purification | Protein A or G purified from hybridoma culture supernatant |
| Immunogen | <i>E. coli</i> -derived recombinant human CEACAM-4 Phe36-Val140 Accession # O75871 |
| 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 either lyophilized or as a 0.2 µm filtered solution in PBS. |

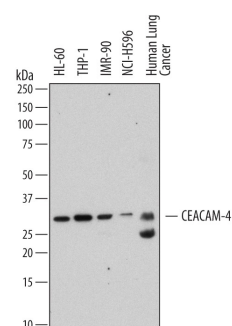
APPLICATIONS

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 | 2 µg/mL | See Below |
| Immunohistochemistry | 8-25 µg/mL | See Below |

DATA

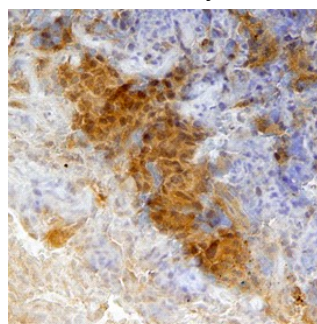
Western Blot



Detection of Human CEACAM-4 by Western Blot.

Western blot shows lysates of HL-60 human acute promyelocytic leukemia cell line, THP-1 human acute monocytic leukemia cell line, IMR-90 human lung fibroblast cell line, NCI-H596 human lung adenocarcinoma cell line, and human lung cancer tissue. PVDF membrane was probed with 2 µg/mL of Mouse Anti-Human CEACAM-4 Monoclonal Antibody (Catalog # MAB4354) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for CEACAM-4 at approximately 30 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 1](#).

Immunohistochemistry



CEACAM-4 in Human Lung Cancer Tissue.

CEACAM-4 was detected in immersion fixed paraffin-embedded sections of human lung cancer tissue using Mouse Anti-Human CEACAM-4 Monoclonal Antibody (Catalog # MAB4354) at 15 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to the cytoplasm of epithelial cells. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

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|--------------------------------|--|
| Reconstitution | Reconstitute at 0.5 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

Carcinoembryonic antigen cell adhesion molecule 4 (CEACAM-4), also known as CGM7 and W236, is a 40 kDa transmembrane glycoprotein member of the CEACAM family of proteins. Its 209 amino acid extracellular domain contains one Ig-like V-type domain. CEACAM-4 is expressed on granulocytes as well as on B and T cell lymphoblastic leukemias. Mouse and rat orthologs of CEACAM-4 have not been described.