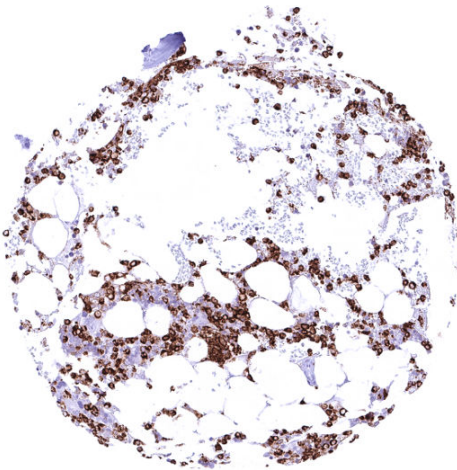


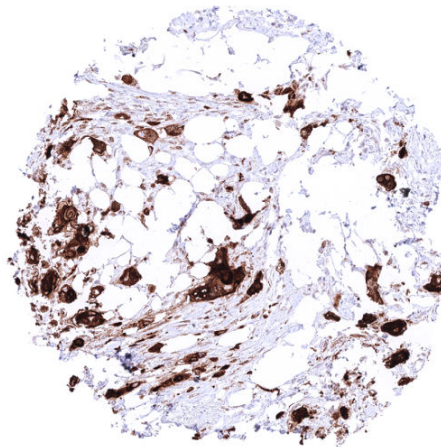
Anti- CEACAM6 Antibody MSVA-066R/ Recombinant Rabbit monoclonal

Human SwissProt	P40199
Human Gene Symbol	CEACAM6
Synonyms	Cell adhesion molecule CEACAM6, CD66c ,Carcinoembryonic antigen-related cell adhesion molecule 6 (CEA cell adhesion molecule 6), Non-specific crossreacting antigen, Normal cross-reacting antigen, CEACAM6, NCA
Specificity	CEACAM6
Immunogen	Recombinant human CEACAM6 fragment
Isotype	Rabbit / IgG
Species Reactivity	Human

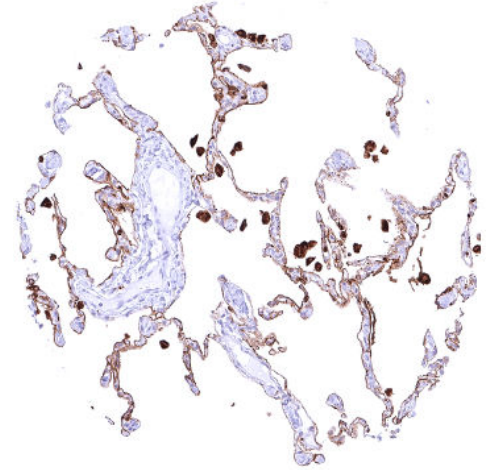
Localization	Membranous & Cytoplasmic
Storage & Stability	Antibody with azide – store at 2 to 8 C. Antibody without azide – store at -20 to -80 C. Antibody is stable for 24 months. Non-hazardous. No MSD required.
Supplied As	Purified antibody from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with <1% BSA & <0.1% azide. Antibody concentrate is optimized for dilution within dilution range using commercially available antibody diluent for IHC.
Positive Control	Lung: A strong membranous CEACAM6 staining of all alveolar pneumocytes and a strong cytoplasmic and membranous CEACAM6 positivity of alveolar macrophages should be seen.
Negative Control	Kidney: All epithelial cells must not show CEACAM6 staining.



Bone marrow with strong CEACAM6 staining of a large fraction of cells (myeloid differentiation).



Colorectal adenocarcinoma with intense membranous and cytoplasmic CEACAM6 staining of all tumor cells.



Lung with strong membranous CEACAM6 staining of alveolar pneumocytes and of macrophages.

Biology

CEACAM6 (CD66c) is a glycosylphosphatidylinositol (GPI)-anchored cell-surface protein of the carcinoembryonic antigen (CEA) immunoglobulin superfamily. The CEACAM6 gene maps to chromosome 19q13.2 within the CEA gene cluster. CEACAM6 mediates cell-cell adhesion (homo- and heterophilic interactions with other CEACAMs) and it contributes to epithelial architecture and innate immune interactions. It is primarily expressed in granulocytes, alveolar macrophages and in selected epithelial cell types. Genetic diseases or cancer predispositions are not known to be related to mutations or variants of the CEACAM6 gene. Unlike other cell adhesion molecules, CEACAM6 lacks both a transmembrane and a cytoplasmic domain. This enables CEACAM6 to mediate cell-cell and cell-matrix adhesion through lateral associations with lipid rafts and co-receptors, especially integrins. Evidence for a role of CEACAM6 in cancer is accumulating. CEACAM6 expression is especially common in pancreatic adenocarcinoma and in other gastrointestinal epithelial cancers although it can also occur in various other cancer types. High CEACAM6 expression levels have been found to be associated with invasion, metastasis, and chemotherapy resistance in several cancer types. Based on its location on the cell-surface CEACAM6 is currently being explored as a therapeutic target protein in cancer.

Potential Research Applications

-Knowledge on prevalence and clinical significance of CEACAM6 expression across different cancer types is incomplete.

- Are there tumor specific structural/glycosylation variants of CEACAM6 that can be exploited for highly tumor-selective therapeutics?
- How does CEACAM6 expression modulate anti-tumor immunity in human tumors?
- Can CEACAM6 be used as an early detection marker for pancreatic neoplasms?
- Is tumor-cell CEACAM6 expression spatially relate with local immune exclusion?

Protocol Suggestions

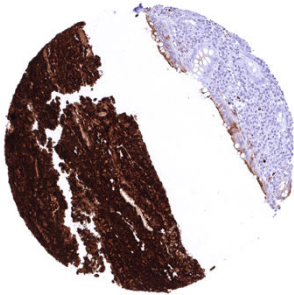
Dilution: 1:100 – 1:200 ; pH 7,8 is optimal. Freshly cut sections should be used (more than 10 days between cutting and staining deteriorates staining intensity for most antibodies in IHC).

Limitations

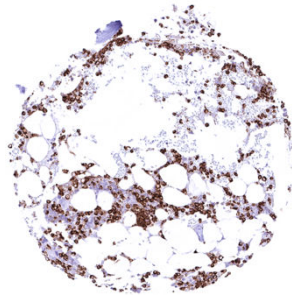
This antibody is available for **research use only** and is not approved for use in diagnostics.

Warranty

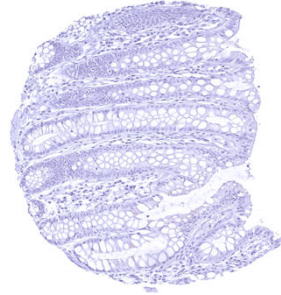
There are no warranties, expressed or implied, which extend beyond this description. MSVA is not liable for any personal injury or economic loss resulting from this product.



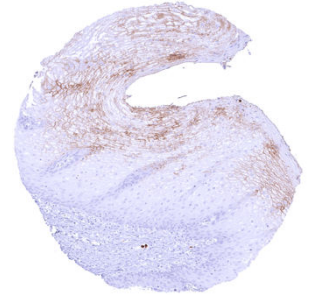
Appendix, mucosa – Moderate apical membranous CEACAM6 staining of at least a fraction of surface epithelial cells. The CEACAM6 staining is weaker in glandular cells.



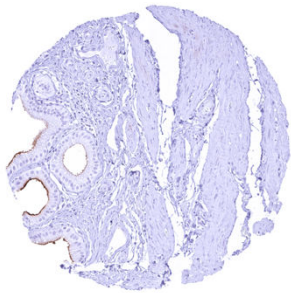
Bone marrow – Strong CEACAM6 staining of a subset of cells, probably of the myeloid cell line.



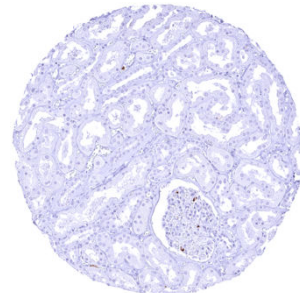
Colon descendens, mucosa



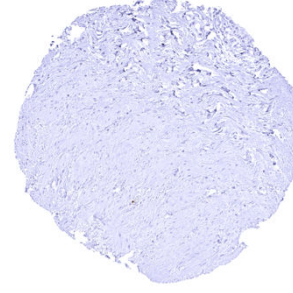
Esophagus, squamous epithelium – Weak to moderate membranous CEACAM6 staining of a large fraction of squamous epithelial cells especially of the upper half of the epithelium.



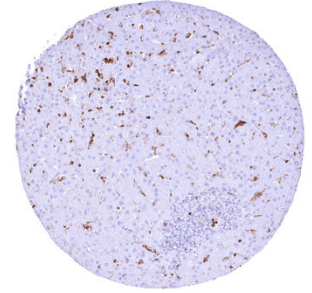
Gallbladder, epithelium – Moderate to strong apical membranous CEACAM6 staining of some epithelial cells.



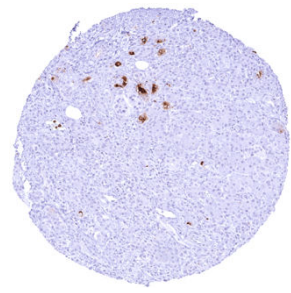
Kidney, cortex – CEACAM6 staining is limited to inflammatory cells.



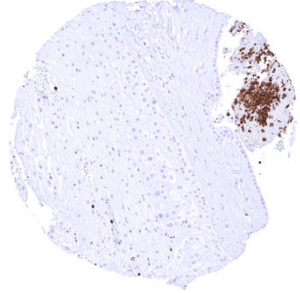
Kidney, pelvis, muscular wall



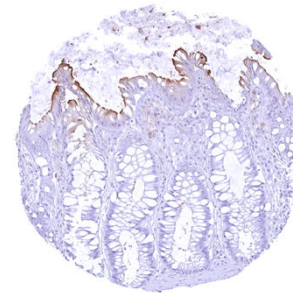
Liver – Strong membranous and cytoplasmic CEACAM6 staining of many intravascular inflammatory cells.



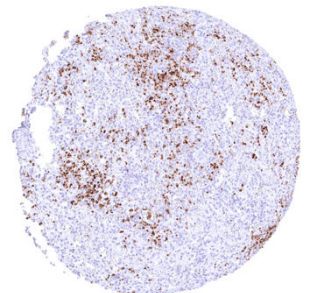
Pancreas – Strong membranous and cytoplasmic CEACAM6 staining of a fraction of small excretory ducts.



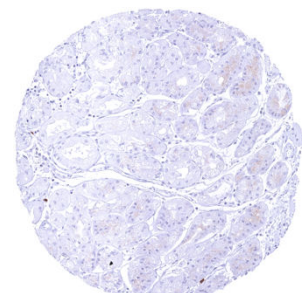
Placenta (amnion and chorion) – Strong CEACAM6 staining of a group of inflammatory cells.



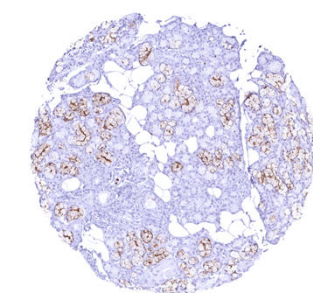
Rectum, mucosa – Strong apical membranous CEACAM6 staining of surface epithelial cells



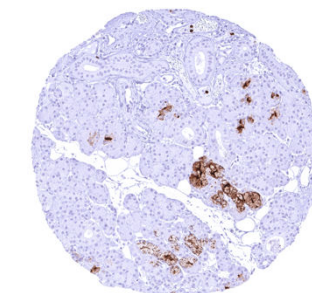
Spleen – Strong CEACAM6 staining of a large fraction of inflammatory cells.



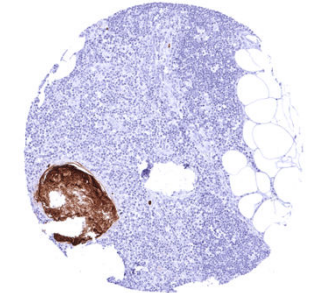
Stomach, corpus



Sublingual gland – Distinct membranous and cytoplasmic CEACAM6 staining of mucinous glandular cells.



Submandibular gland – Distinct membranous and cytoplasmic CEACAM6 staining of mucinous glandular cells.



Thymus – Strong CEACAM6 staining of a corpuscle of Hassall's.