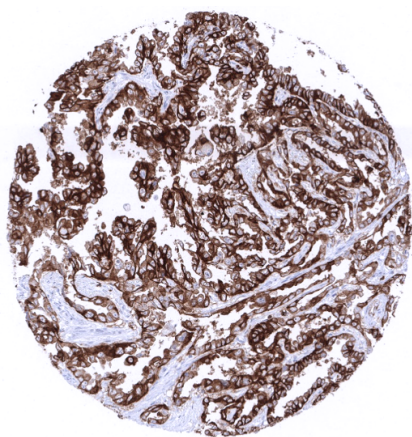


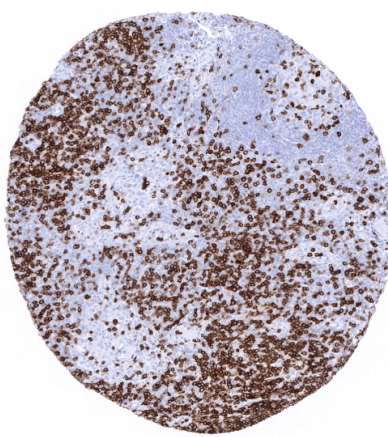
Anti- CD7 Antibody MSVA-007R / Recombinant Rabbit monoclonal

Human SwissProt	P09564
Human Gene Symbol	CD7
Synonyms	GP40; Leu9; p41; T-cell leukemia antigen; T-cell surface antigen Leu-9; Tp40; TP41
Specificity	CD7
Immunogen	Recombinant fragment of human CD7
Isotype	Rabbit / IgG
Species Reactivity	Human
Localization	Cell Surface

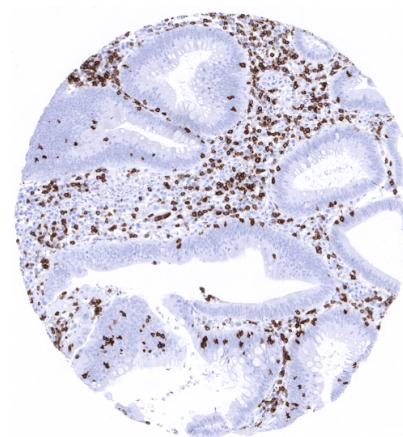
Storage & Stability	Antibody with azide – store at 2 to 8 C. Antibody without azide – store at -20 to -80 C. Antibody is stable for 24 months. Non-hazardous. No MSD required.
Supplied As	200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide.
Positive Control	A moderate to strong, predominantly membranous staining of T-cells in the interfollicular T-zones, the germinal centres of the tonsil, and of the intra-epithelial T-cells in the colon mucosa should be seen
Negative Control	Virtually all epithelial structures should stain negative.



Strong membranous CD7 expression of an adenocarcinoma of the lung.



Tonsil: Strong CD7 positivity of T-lymphocytes, mainly in the interfollicular area.



Colon: Strong CD7 staining of a large fraction of tumor-infiltrating lymphocytes in a colorectal adenocarcinoma. Tumor glands are completely CD7 negative.

Biology

CD7 is a transmembrane costimulatory glycoprotein and a member of the immunoglobulin supergene family. CD7 is one of the first cell surface proteins expressed during T-cell maturation. CD7 is present on all thymocytes, most mature peripheral blood T cells, and on natural killer (NK) cells. The function of CD7 is not fully understood, but it may play a role in T-cell and T-cell/B-cell interactions during early lymphoid development. Only a small fraction of T-lymphocytes lack CD7. Loss of CD7 occurs in a small subset of normal circulating T helper cells as well as in a majority of epidermal and dermal T cells of normal skin. These cells may represent the physiological counterpart of CD7 negative malignant T cells. Several studies indicate that the number of CD4+CD7- T cells increases with age and in diseases such as chronic inflammation and in T-cell malignancies. Occasionally CD7 can be expressed in epithelial cells such as in gallbladder surface epithelium. In rare instances, CD7 is also expressed in solid cancers. The relevance of CD7 in solid tumors is unclear.

Potential Research Applications

- The function of CD7 is not fully understood.
- The role of T-lymphocyte subpopulations (such as CD4, CD8) with loss of CD7 needs to be investigated.

-The prevalence of CD7 expression in hematological neoplasms should be further investigated.

-The clinical significance of CD7 expression in non-hematological neoplasms is unclear.

Protocol Suggestions

Dilution 1: 150; pH 7,8 is optimal. Freshly cut sections should be used (less than 10 days between cutting and staining).

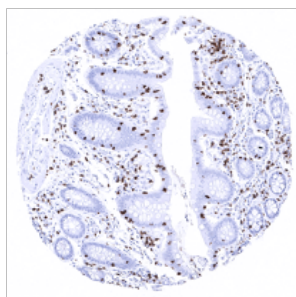
Limitations

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

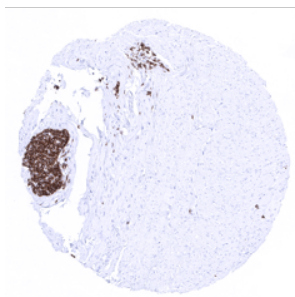
Not for resale without express authorization.

Warranty

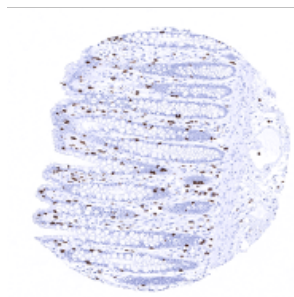
There are no warranties, expressed or implied, which extend beyond this description. MSVA is not liable for any personal injury or economic loss resulting from this product.



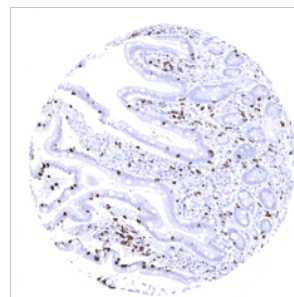
Appendix, mucosa



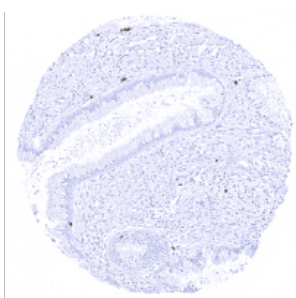
Appendix, muscular wall



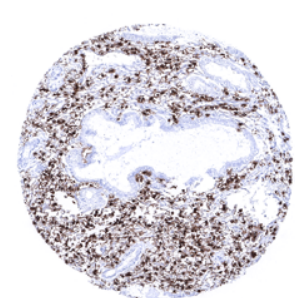
Colon descendens, mucosa



Duodenum, mucosa



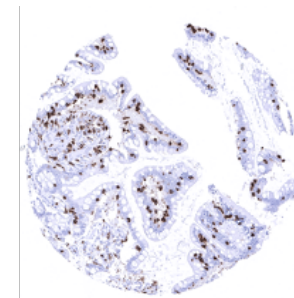
Endocervix



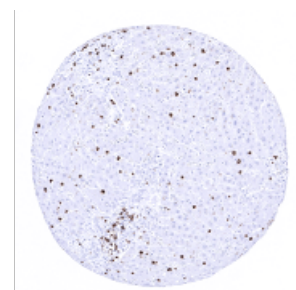
Endometrium, secretion



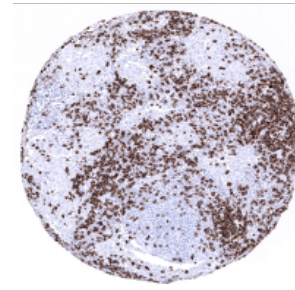
Gallbladder, epithelium - CD7
 immunostaining can be occasionally
 seen on basolateral membranes of the
 surface epithelium of the gallbladder



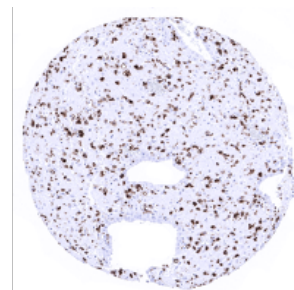
Ileum, mucosa



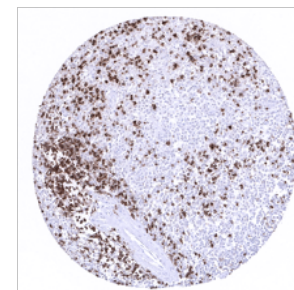
Liver



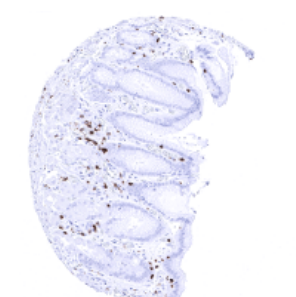
Lymph node



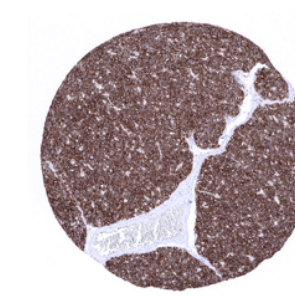
Placenta early, decidua



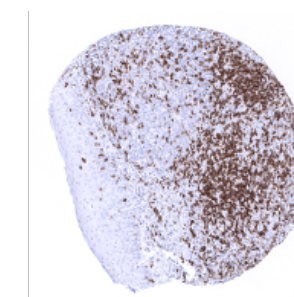
Spleen



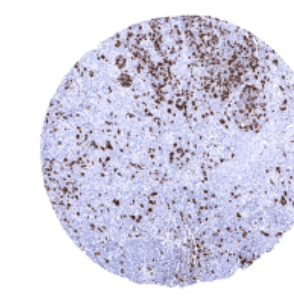
Stomach, antrum



Thymus



Tonsil, surface epithelium



Tonsil