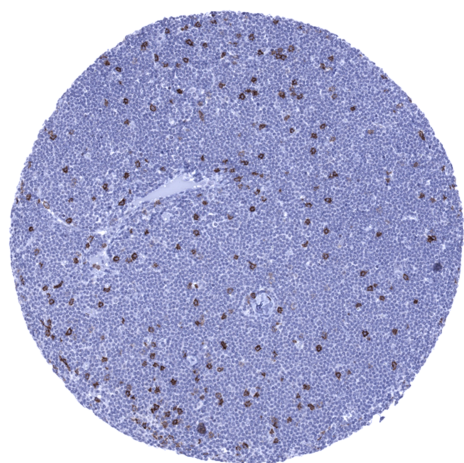


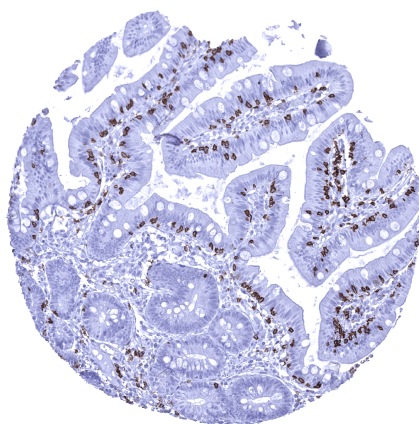
Anti-CD8 Antibody MSVA-008R / Recombinant Rabbit Monoclonal

Human SwissProt	P01732
Human Gene Symbol	CD8A
Synonyms	CD8 antigen, alpha polypeptide (p32), T8/Leu-2 T-lymphocyte differentiation antigen, Ly3, LYT3, MAL, T-cell surface glycoprotein CD8 alpha chain
Specificity	CD8
Immunogen	Recombinant protein of human CD8
Isotype	Rabbit / IgG
Species Reactivity	Human

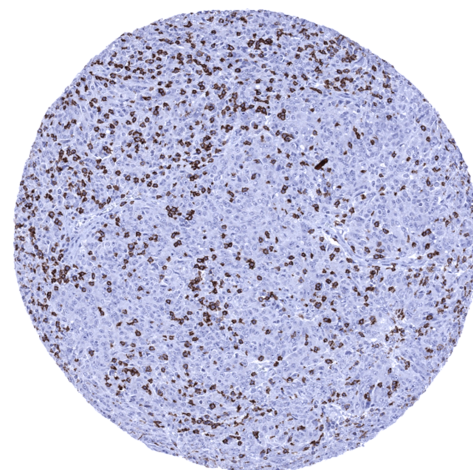
Localization	Cell Surface
Storage & Stability	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSD required.
Supplied As	Purified antibody in Tris pH 7,3-7,7 with 1% BSA, <0,1% NaN ₃ . Also available WITHOUT BSA & azide at 1,0mg/ml.
Positive Control	tonsil (interfollicular areas)
Negative Control	epithelial tissues, majority of cells in germinal centres of lymphatic organs



B-CLL containing interspersed non-neoplastic CD8 positive cells



Duodenum, mucosa - Duodenal mucosa containing numerous intraepithelial CD8 positive lymphocytes



Squamous cell carcinoma containing numerous CD8 positive tumor infiltrating lymphocytes

Biology

CD8 (cluster of differentiation 8) is a transmembrane glycoprotein co-receptor for the T-cell receptor (TCR) with a pivotal role in T cell signaling and cytotoxic T cell antigen interactions. To exert its function, CD8 forms a dimer, consisting of a pair of CD8 chains. The CD8 chains exist in multiple isoforms which are members of the immunoglobulin superfamily and contain an immunoglobulin variable (IgV)-like extracellular domain. The extracellular IgV-like domain of CD8- α interacts with the Class I MHC molecule. This keeps the cytotoxic T cell and antigen presenting cell closely together during antigen-specific activation. The CD8 co-receptor is predominantly expressed on the surface of cytotoxic T cells, but can also be found on natural killer cells, and cortical thymocytes. For practical purposes, the CD8 molecule is considered a marker for cytotoxic T cell population as this cell type predominates strongly among CD8 positive cells. The staining of CD8 positive cells in normal tissues reflects the physiologic distribution of cytotoxic T cells (about 30% of peripheral T-cells), natural killer cells, and cortical thymocytes. Accordingly, CD8 positive cells are most prominently seen in the thymus and lymphatic organs. In addition, venous sinuses in the spleen (littoral cells) stain positive. A CD8 immunostaining is seen in a fraction of T-cell lymphomas. In rare cases, B-cell lymphomas can also express CD8, however. A variable number of tumors infiltrating CD8 positive lymphocytes is regularly seen in all kinds of neoplasms.

Potential Research Applications

- The clinical significance of the number of intratumoral CD8 positive lymphocytes is under intensive research.
- CD8 is a key component of multicolor assays analyzing the role of lymphocyte subsets in cancers and other diseases.
- The prevalence of a positive CD8 immunostaining in hematological and non-hematological neoplasms should be further evaluated.

Protocol Suggestions

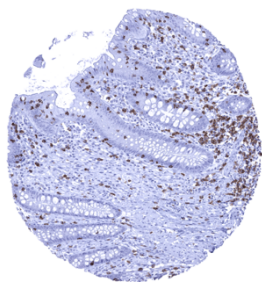
Dilution: 1:150; pH 7,8 is optimal. Freshly cut sections should be used (less than 10 days between cutting and staining deteriorates staining intensity for most antibodies in IHC).

Limitations

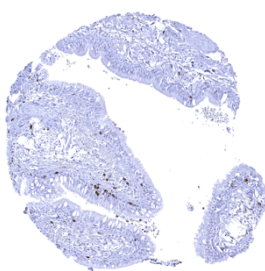
This antibody is available for **research use only** and is not approved for use in diagnostics.

Warranty

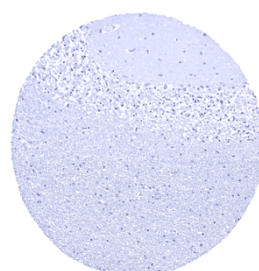
There are no warranties, expressed or implied, which extend beyond this description. MSVA is not liable for any personal injury or economic loss resulting from this product.



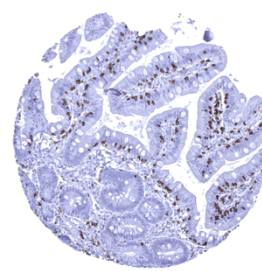
Appendix, mucosa



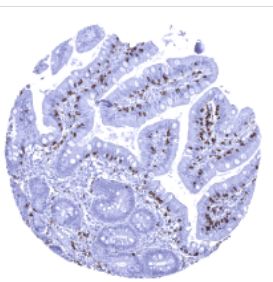
Bronchus, mucosa - Scattered CD8 positive lymphocytes are seen



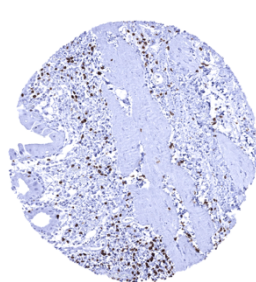
Cerebellum (molecular layer, Purkinje cell layer, granule cell layer, white matter)



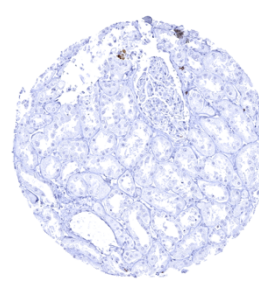
Duodenum, mucosa - Scattered CD8 positive lymphocytes are seen



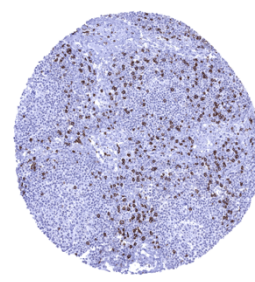
Fallopian tube, mucosa - Scattered CD8 positive lymphocytes are seen



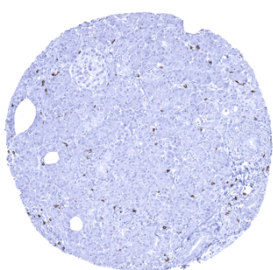
Gallbladder, epithelium - Scattered CD8 positive lymphocytes are seen



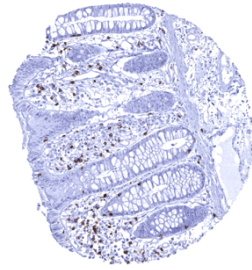
Kidney, cortex



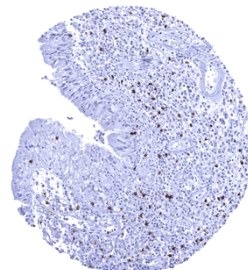
Lymph node - Numerous scattered CD8 positive lymphocytes are seen



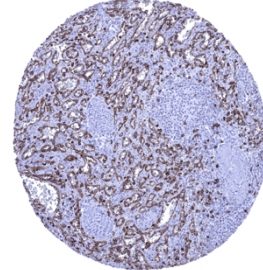
Pancreas - Scattered CD8 positive lymphocytes are seen



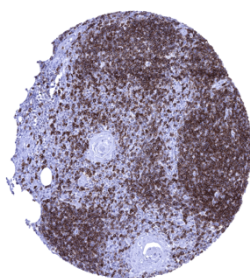
Rectum, mucosa - Scattered CD8 positive lymphocytes are seen



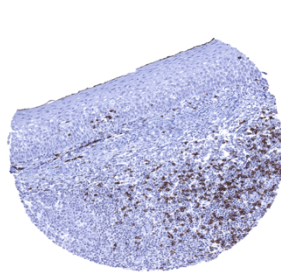
Sinus paranasales - Scattered CD8 positive lymphocytes are seen



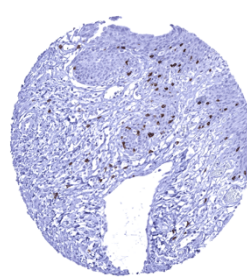
Spleen - Scattered CD8 positive lymphocytes are seen in the spleen. The cells lining venous sinuses are also CD8 positive



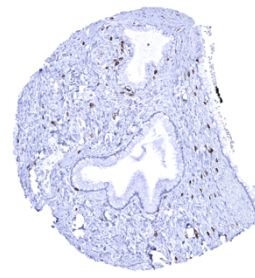
Thymus - CD8 positive lymphocytes predominate in the thymus



Tonsil, surface epithelium - Numerous CD8 positive lymphocytes are seen



Urinary bladder, urothelium - Scattered CD8 positive lymphocytes are seen



Uterus, endocervix - Scattered CD8 positive lymphocytes are seen