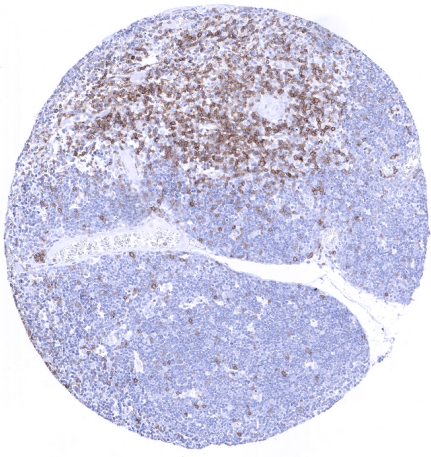


Anti-CD27 Antibody MSVA-027M / Mouse monoclonal

Human SwissProt	P26842
Human Gene Symbol	CD27
Synonyms	LPFS2; S152; T cell activation antigen S152; T-cell activation antigen CD27; T14; TNFRSF7; TNFSF7; Tp55; Tumor necrosis factor receptor superfamily member 7
Specificity	CD27
Immunogen	Recombinant human CD27 protein
Isotype	Mouse / IgG1
Species Reactivity	Human
Localization	Cell Surface

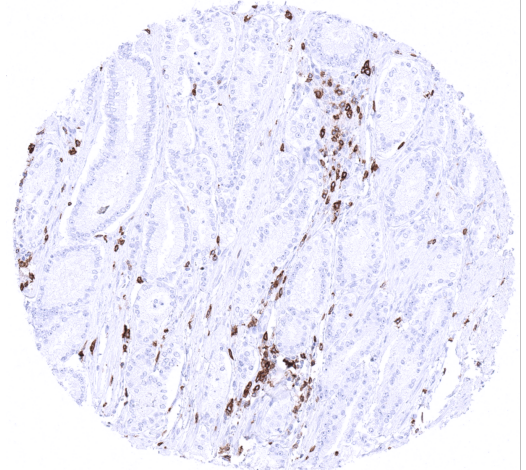
Storage & Stability	Antibody with azide – store at 2 to 8 C. Antibody without azide – store at -20 to -80 C. Antibody is stable for 24 months. Non-hazardous. No MSD required.
Supplied As	200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide.
Positive Control	Tonsil: A strong, predominantly membranous staining is expected in the majority of interfollicular lymphocytes but also in a fraction of lymphocytes in the germinal centres and the mantle zone.
Negative Control	Tonsil: Complete absence of staining should be seen in some lymphocytes and all epithelial cells.



In the thymus, CD27 expression is seen in a large fraction of medullary lymphocytes but only in a few cortical lymphocytes.



Strong CD27 expression in all tumor cells of a diffuse large B-cell lymphoma



Adenocarcinoma of the prostate containing CD27 positive tumor infiltrating lymphocytes.

Biology

The CD27, a member of the TNF-receptor superfamily, is a homodimeric phosphoglycoprotein of 120 kDa constitutively expressed on thymocytes, naïve T cells, B cells, and NK cells. The ligand for CD27, CD70, is a transmembrane glycoprotein expressed on antigen presenting cells in response to antigen stimulation. Upon T-cell activation, CD27 is upregulated and appears to induce proliferation and local accumulation of CD8+ T cells. CD27 is later downregulated after several rounds of division and differentiation toward effector cells. CD27 and its ligand CD70 play a major role in the immune response against cancers. Accordingly, Varlilumab, an agonistic antibody that binds to CD27 is an experimental cancer treatment currently in phase I clinical trials. In normal tissues, CD27 is exclusively seen on lymphocytes. In the thymus, CD27 is present on the vast majority of medullary but only rarely in cortical lymphocytes. In lymph nodes and the tonsil, CD27 is primarily seen in lymphocytes of the interfollicular area but also present in a considerable fraction of lymphocytes in the germinal centre and the mantle zone. In the spleen, almost all cells of the white pulp, but only few cells in the red pulp are stained. CD27 is also expressed in the majority of mucosa associated lymphocytes in the gastrointestinal and urinary tract and also in the majority of scattered lymphocytes occasionally seen in other tissues including bone marrow. CD27 can also be expressed on various types of T-cell and B-cell lymphomas. CD27 positive lymphocytes account for a variable but often large fraction of tumor infiltrating lymphocytes in all kinds of solid cancers.

Potential Research Applications

-CD27 and its ligand CD70 are a “hot topic” in immuno-oncology. The role of these proteins and their interplay with other modulators of the immune system are currently investigated in a high number of laboratories.

-It is currently unclear whether anti-CD27 antibodies may be therapeutically applied in CD27 positive lymphomas.

Protocol Suggestions

Dilution: 1:150 ; pH 9 is optimal. Freshly cut sections should be used (less than 10 days between cutting and staining deteriorates staining intensity for most antibodies in IHC).

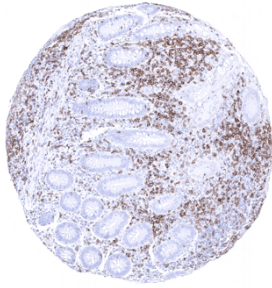
Limitations

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

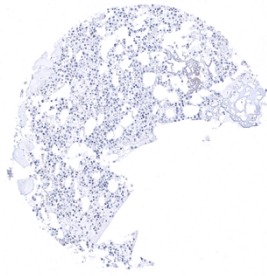
Not for resale without express authorization.

Warranty

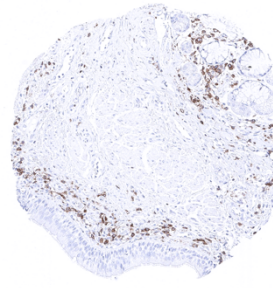
There are no warranties, expressed or implied, which extend beyond this description. MSVA is not liable for any personal injury or economic loss resulting from this product.



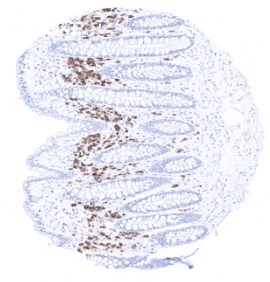
Appendix, mucosa



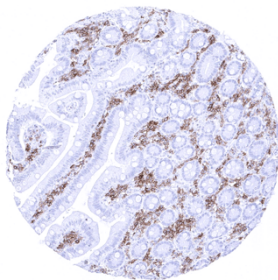
Bone marrow



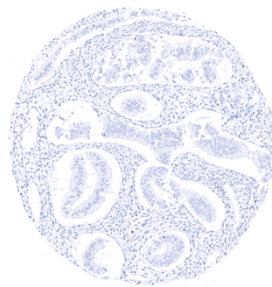
Bronchus, mucosa



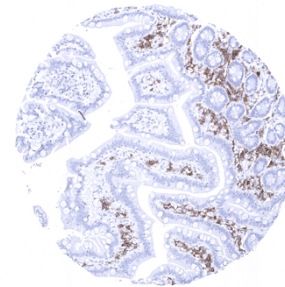
Colon descendens, mucosa



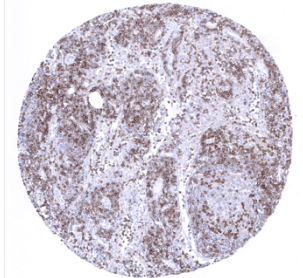
Duodenum, mucosa



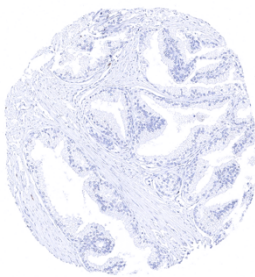
Endometrium, proliferation



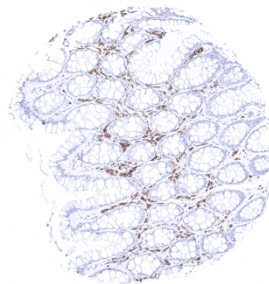
Ileum, mucosa



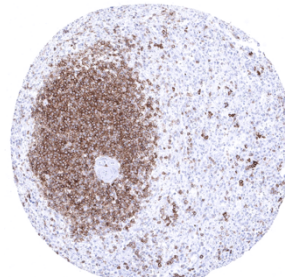
Lymph node



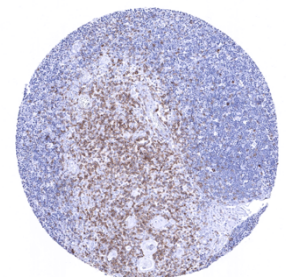
Prostate



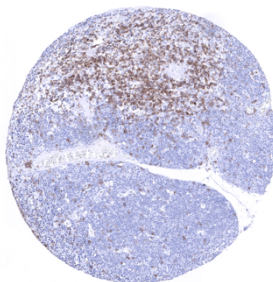
Rectum, mucosa



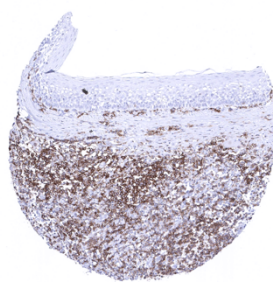
Spleen



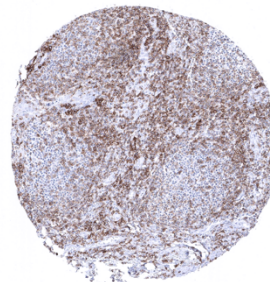
Thymus



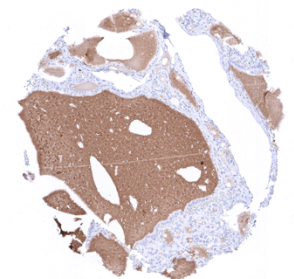
Thymus



Tonsil, surface epithelium



Tonsil



Thyroid gland