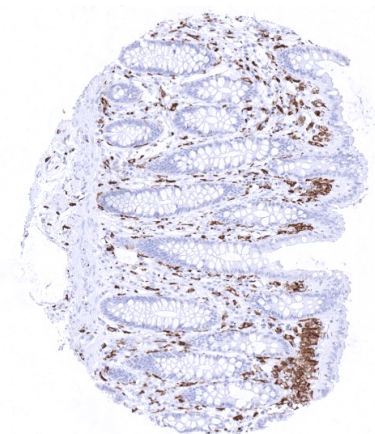


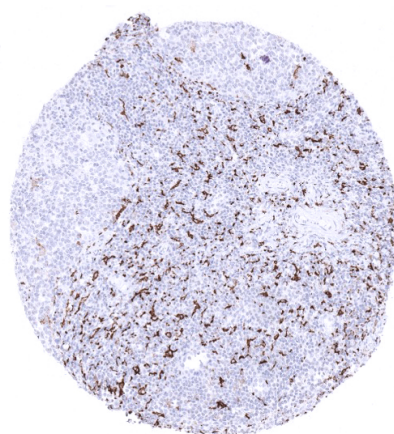
## Anti-CD163 Antibody MSVA-163M/ Mouse monoclonal

Human SwissProt	Q86V7
Human Gene Symbol	CD163
Synonyms	CD163, CD163 antigen, Macrophage-associated antigen, M130, CD163 molecule, Hemoglobin scavenger receptor, MM130; Scavenger receptor cysteine rich type 1 protein M130
Specificity	CD163
Immunogen	Recombinant human CD163 fragment
Isotype	Mouse / IgG2, kappa
Species Reactivity	Human
Localization	Cytoplasmic

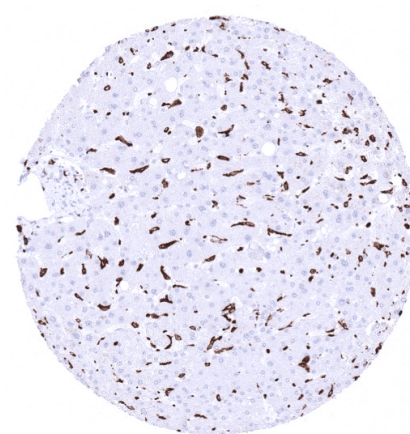
Storage & Stability	Antibody with azide – store at 2 to 8 C. Antibody without azide – store at -20 to -80 C. Antibody is stable for 24 months. Non-hazardous. No MSD required.
Supplied As	200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide.
Positive Control	A moderate to strong cytoplasmic staining of macrophages should be seen in the interfollicular zones of the tonsil, lamina propria of the appendix and in the Kupffer cells of the liver (see images). Macrophages surrounding the vessels in brain specimens should stain positive, while microglial cells should not show CD163 staining.
Negative Control	CD163 staining should not be seen in hepatocytes and in epithelial cells of the appendix and tonsil.



**Strong CD163 positivity of macrophages in the lamina propria of rectum mucosa.**



**A strong CD163 staining of macrophages is seen in the interfollicular zones of a lymph node, while germinal centre macrophages mostly stain negative.**



**Strong CD163 positivity in Kupffer cells and intrasinusoidal blood monocytes in the liver.**

### Biology

CD163 (Cluster of Differentiation 163) serves as a marker of cells from the monocyte/macrophage lineage. CD163 is a high affinity scavenger receptor for the hemoglobin-haptoglobin complex and for hemoglobin alone. CD163 expression is a feature of macrophages undergoing differentiation towards the "alternatively activated" M2 phenotype. CD163 is thus regarded as a specific monocyte/macrophage marker for M2 macrophages. M2 macrophages have various different functions, including regulation of immunity, maintenance of tolerance, and tissue repair/wound healing. Presence of CD163+ macrophages was suggested to have a stronger association with unfavorable clinicopathological cancer features than CD68+ macrophages. CD163 is expressed by all circulating monocytes and a majority of macrophages in tissues. CD163 positivity is for example seen in dendrocytes of the spleen, alveolar macrophages of the lung and Kupffer cells of the liver. In lymphatic tissues, CD163 is lacking in macrophages of the mantle zone, a large fraction of macrophages of the germinal center cells in lymph follicles, Langerhans cells and interdigitating reticulum cells.

### Potential Research Applications

-CD163 is of very high research interest as it represents an important component of inflammatory processes in oncological and inflammatory disease.

-CD163 is a marker for M2 macrophages, the relevance of which needs to be further investigated.

-The prognostic relevance of the number of CD163 positive cells in cancer is not well known.

### Protocol Suggestions

**Dilution: 1:150; 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).

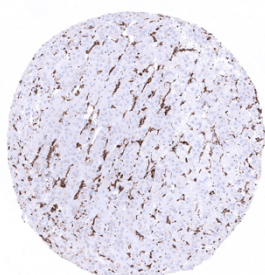
### Limitations

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

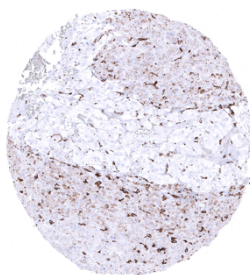
Not for resale without express authorization.

### Warranty

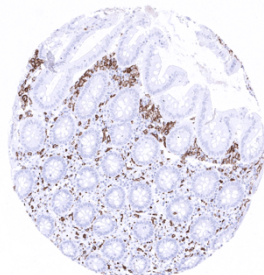
There are no warranties, expressed or implied, which extend beyond this description. MSVA is not liable for any personal injury or economic loss resulting from this product.



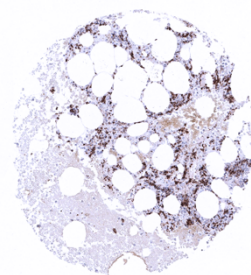
Adrenal gland



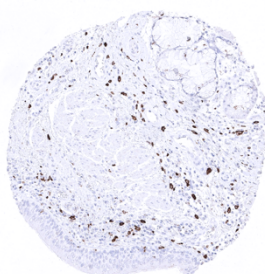
Adrenal gland



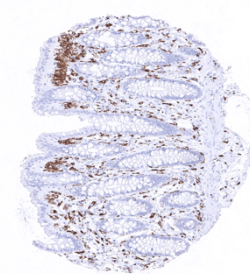
Appendix, mucosa



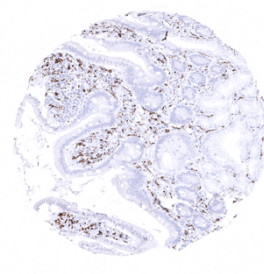
Bone marrow



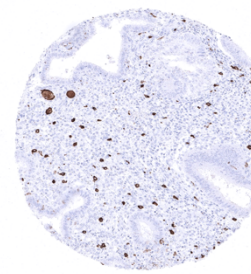
Bronchus, mucosa



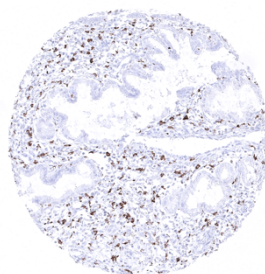
Colon descendens, mucosa



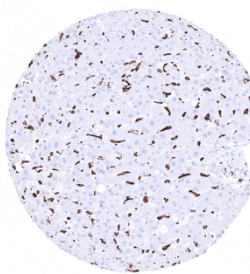
Duodenum, mucosa



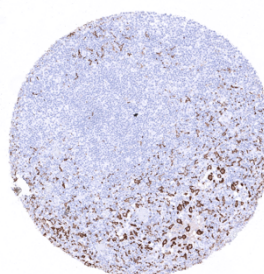
Endometrium, proliferation



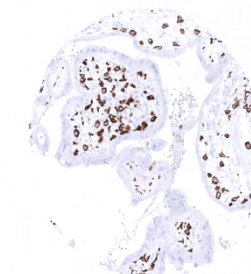
Endometrium, secretion



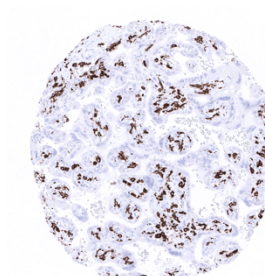
Liver



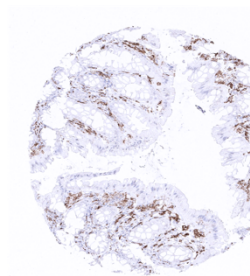
Lymph node



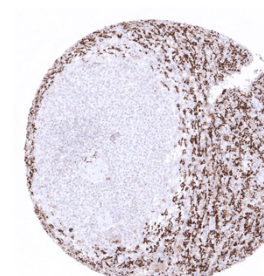
Placenta, early



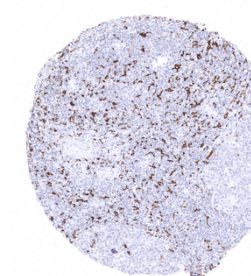
Placenta, mature



Rectum, mucosa



Spleen



Tonsil