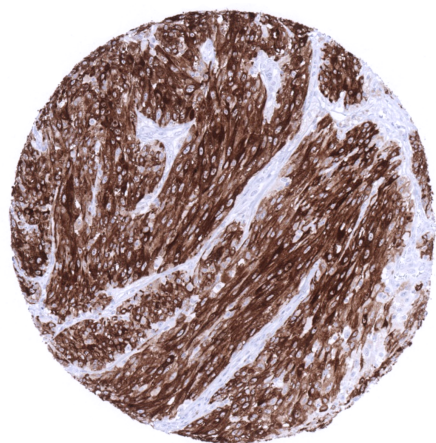


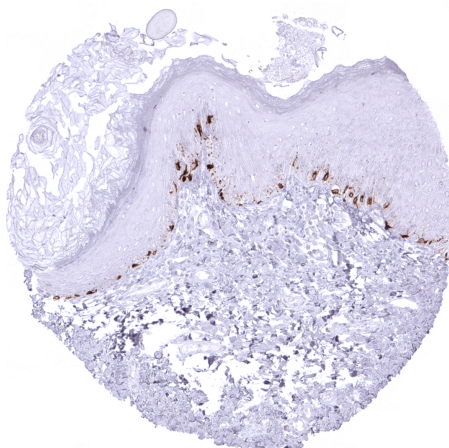
## Anti-Melan A CR (Cross Reactive) MSVA-901M+ / Recombinant Mouse monoclonal

Human SwissProt	Q16655
Human Gene Symbol	MLANA
Synonyms	Antigen LB39-AA, Antigen SK29-AA, Melanoma antigen recognized by T-cells 1, MLAN-A, MLANA
Specificity	Melan A
Immunogen	Recombinant human MART-1 protein
Isotype	Mouse / IgG
Species Reactivity	Human
Localization	Cytoplasmic

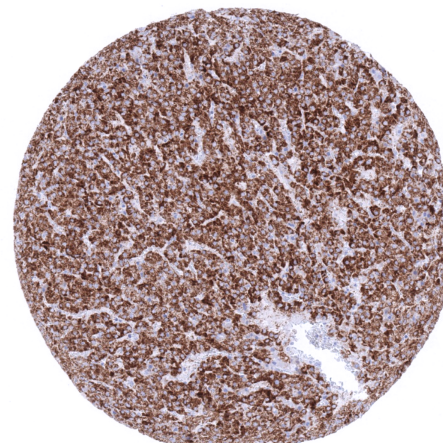
Storage & Stability	Antibody with azide – store at 2 to 8 C. Antibody without azide – store at -20 to -80 C. Antibody is stable for 24 months. Non-hazardous. No MSD required.
Supplied As	200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide.
Positive Control	In normal skin, virtually all melanocytes should show a strong immunostaining including a weak to moderate staining in melanocytic dendrites. Normal adrenal gland should show an at least moderate intensity immunostaining of cortical cells for Melan-A+.
Negative Control	Kidney should not show any staining in the epithelial cells of tubules. Normal adrenal gland should not exhibit any immunostaining of medullary cells for Melan-A+.



**Strong Melan A+ positivity in a malignant melanoma.**



**Normal skin with strong Melan A+ positivity in the cytoplasm and a weak to moderate staining in dendrites of melanocytes.**



**Adrenocortical carcinoma with strong Melan A+ immunostaining in all tumor cells.**

### Biology

The Melan-A (melanocyte antigen) protein, also termed “melanoma antigen recognized by T cells 1” (MART-1) is coded by a gene on chromosome 9p24.1. The 18 kDa protein has a single transmembrane domain and consists of 118 amino acids. The function of the protein is unknown. A small fragment of the protein (about nine amino acids) is bound by MHC class I complexes and presented to cytotoxic T cells. The MART-1/melan-A antigen is specific for the melanocyte lineage, found in normal skin, the retina, and melanocytes, but not in other normal tissues. As few other Melan-A antibodies, MSVA-xxx Melan-A+, not only recognizes the Melan A protein but - as a result of cross-reactivity - also an unknown structure related to corticosteroids. It is thus useful as a marker for benign and malignant melanocytic tumors as well as steroid producing tissues. In normal tissues, a strong staining can be observed in melanocytes in skin and non-keratinizing squamous epithelia from various sites, adrenocortical cells, and in a variable fraction of epithelial cells in the adenohypophysis. A moderate intensity staining is present in theca interna/granulosa cells of ovary and in testicular Leydig cells. In tumors, Melan-A+ staining occurs in the vast majority of primary malignant melanomas, all types of cutaneous naevi and in other tumors of melanocytic differentiation, such as clear cell sarcoma, melanotic neurofibroma, melanotic schwannoma as well as PEComas (perivascular epithelioid cell tumor). Melan A expression is sometimes reduced and/or only patchy in desmoplastic melanoma and in metastatic melanomas.

### Potential Research Applications

- A comprehensive study analyzing Melan-A CR in comparison with Melan-A specific antibodies in various different tumor entities would be helpful to better assess the diagnostic significance of specific and cross-reactive Melan-A antibodies.
- The exact function of Melan-A is unknown.
- The utility of Melan A as a cancer vaccine target is under investigation.

### Protocol Suggestions

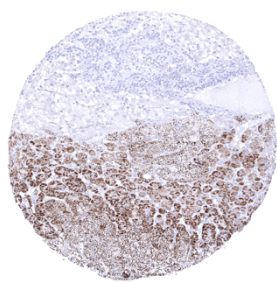
**Dilution: 1:75. pH9 is optimal.** Freshly cut sections should be used (less than 10 days between cutting and staining deteriorates staining intensity for most antibodies in IHC).

### Limitations

This antibody is available for **research use only** and is not approved for use in diagnostics. Not for resale without express authorization.

### Warranty

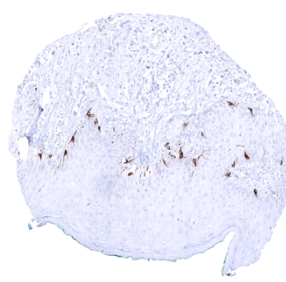
There are no warranties, expressed or implied, which extend beyond this description. MSVA is not liable for any personal injury or economic loss resulting from this product.



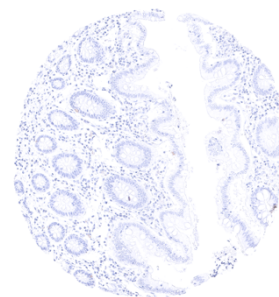
Adrenal gland - Cells of the adrenal gland show a moderate to strong Melan A+ immunostaining in the adrenal cortex but not in the medulla



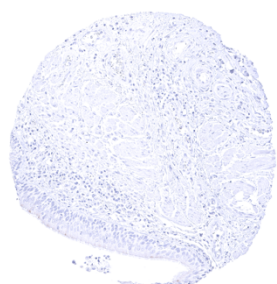
Adrenal gland - In the adrenal gland, a moderate to strong Melan A+ immunostaining is seen in cortical but not medullary cells



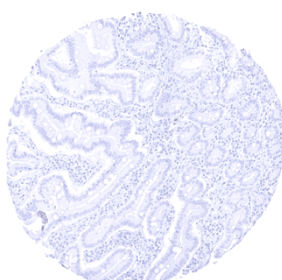
Anal canal, skin - strong Melan-A immunostaining is seen in melanocytes of anal skin



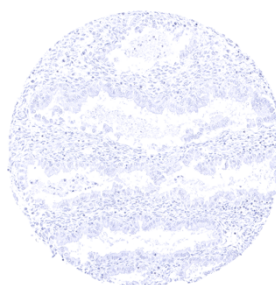
Appendix, mucosa



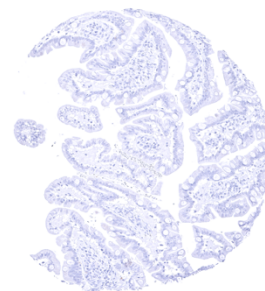
Bronchus, mucosa - A faint immunostaining can be seen at the apical membranes of a fraction of ciliated cells of respiratory epithelium (not in all samples)



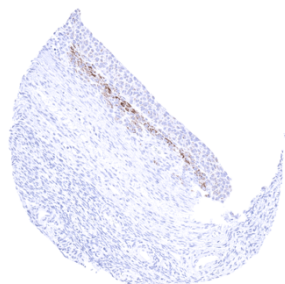
Duodenum, mucosa



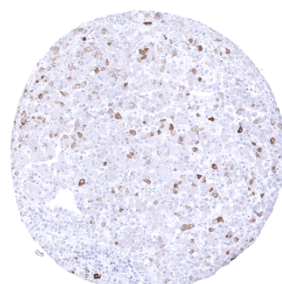
Endometrium, secretion



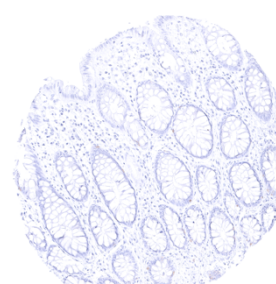
Ileum, mucosa



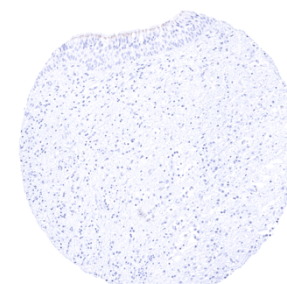
MelanA - In the ovary, a moderate intensity Melan A+ staining is seen in theca interna cells of ovary



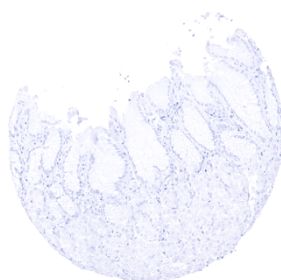
Pituitary, anterior lobe - In the adenohypophysis, a moderate to strong Melan A+ immunostaining can be seen in scattered epithelial cells (not in all samples)



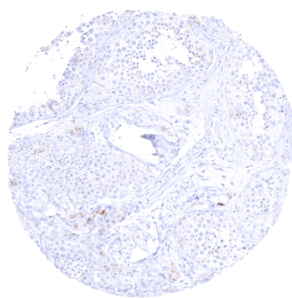
Rectum, mucosa



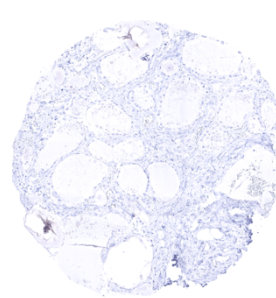
Sinus paranasales - A faint immunostaining can be seen at the apical membranes of a fraction of ciliated cells of respiratory epithelium (not in all samples)



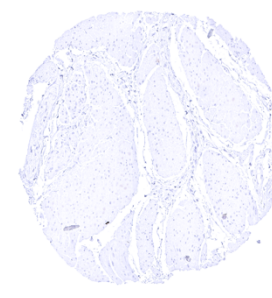
Stomach, corpus



Testis - A weak to moderate Melan A+ immunostaining can be seen in a fraction of Leydig cells of the testis



Tyroid gland



Urinary bladder, muscular wall