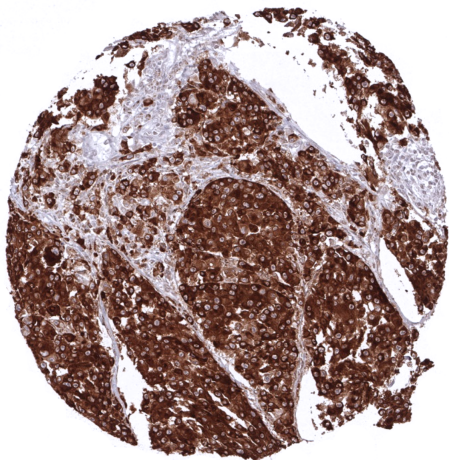


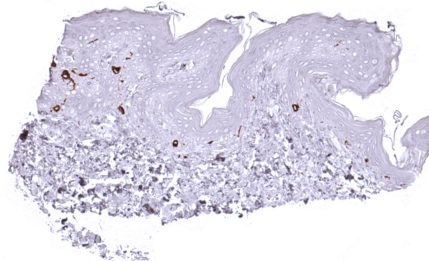
Anti-Melan A Specific Antibody MSVA-900M / Recombinant Mouse monoclonal

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

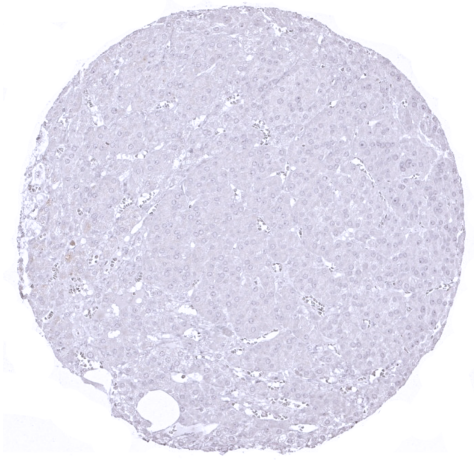
Storage & Stability	Antibody with azide – store at 2 to 8 C. Antibody without azide – store at -20 to -80 C. Antibody is stable for 24 months. Non-hazardous. No MSD required.
Supplied As	200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide.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



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.



The antibody Melan-A (MSVA-900M-) does not show reactivity with adrenocortical tissue or other steroid producing 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. Melan-A is thus useful as a marker for benign and malignant melanocytic tumors. In normal tissues, a strong staining can only be observed in melanocytes in skin and non-keratinizing squamous epithelia from various sites. 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 epitheloid 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: 1:150 ; pH7,8 is optimal. Freshly cut sections should be used (less than 10 days between cutting and staining deteriorates staining intensity for most antibodies in IHC).

Pitfalls

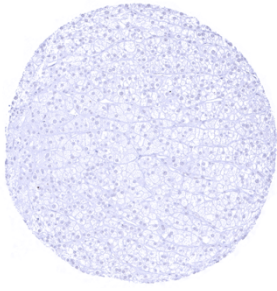
Several Melan-A antibodies (but not MSVA-900M-) share a cross reactivity for a structure related to steroid hormone producing cells. Therefore, some users of “Melan-A antibodies” use these for diagnosing adrenal cortical, sex-cord and pituitary tumors. This antibody is specific for melanocytes and does not stain steroid producing cells. Our antibody **MSVA-900M+ (Melan-A+)** has this cross-reactivity and stains melanocytes plus steroid hormone producing cells.

Limitations

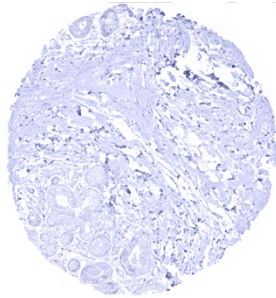
This antibody is available for **research use only** and is not approved for use in diagnostics.

Warranty

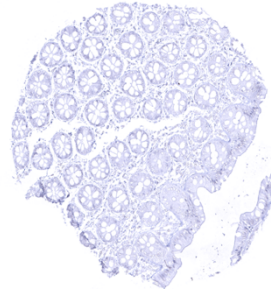
There are no warranties, expressed or implied, which extend beyond this description. MSVA is not liable for any personal injury or economic loss resulting from this product.



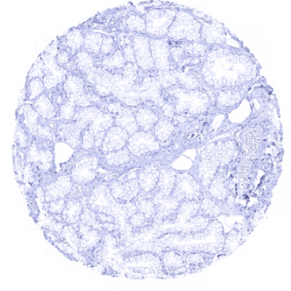
Adrenal gland- Using the antibody MSVA-900M (Melan A), immunostaining is absent in adrenal gland



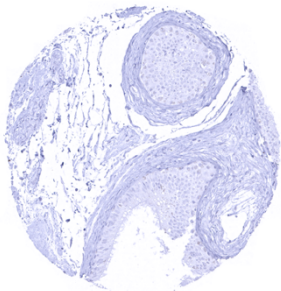
Breast



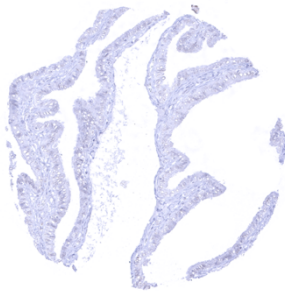
Colon descendens, mucosa



Duodenum, Brunner gland



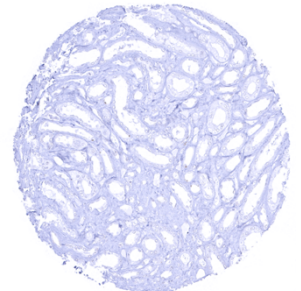
Epididymis



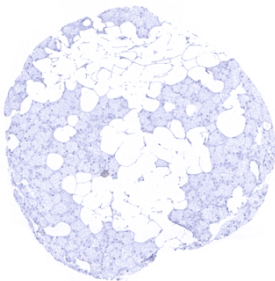
Fallopian tube, mucosa



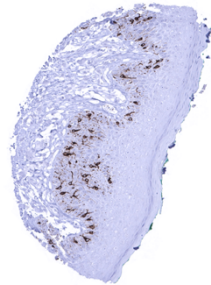
Ileum, mucosa



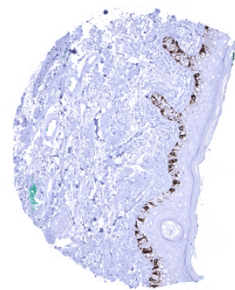
Kidney, medulla



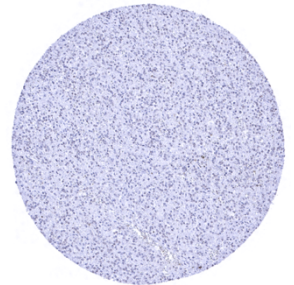
Parotid gland



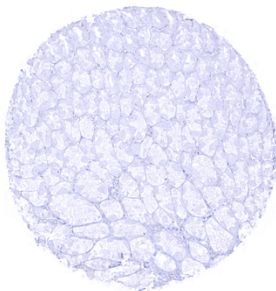
Skin- A strong Melan-A immunostaining is seen in melanocytes in skin



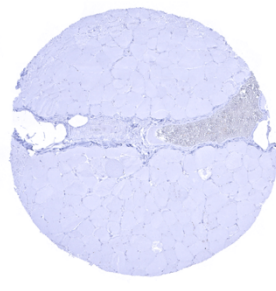
Skin, hairfollicel and sebaceous glands



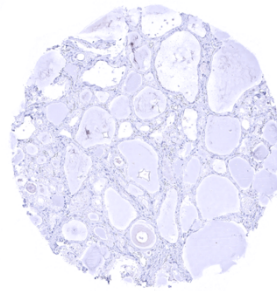
Spleen



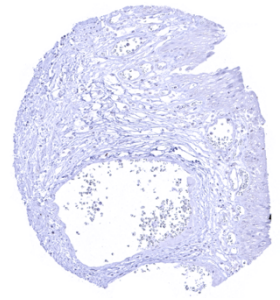
Stomach, corpus



Striated muscle



Thyroid gland



Urinary bladder, urothelium