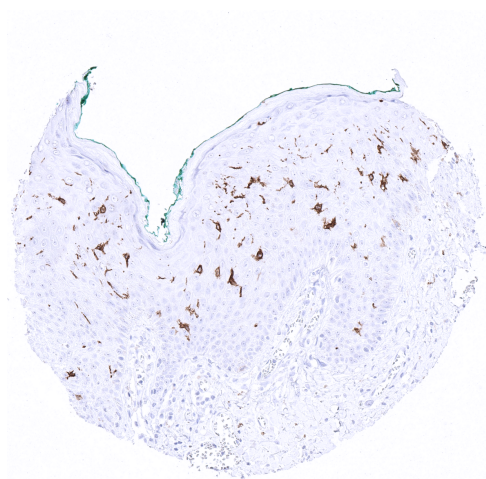


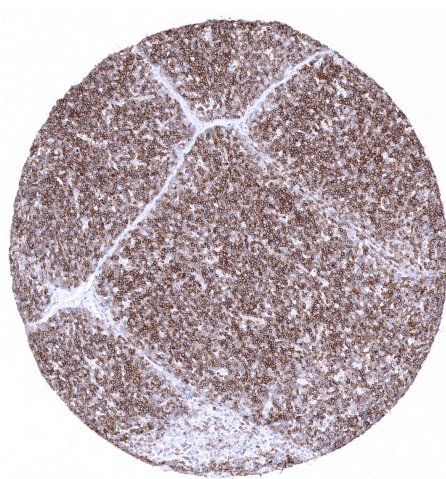
Anti-CD1a Antibody MSVA-001M / Recombinant Mouse monoclonal

Human SwissProt	P06126
Human Gene Symbol	CD1A
Synonyms	Cortical thymocyte antigen CD1A, Epidermal dendritic cell marker CD1a antibody, FCB6, HTA1, T cell surface antigen T6 / Leu 6, T-Cell Surface Glycoprotein CD1A
Specificity	CD1A
Immunogen	Recombinant human CD1a protein
Isotype	Mouse / IgG1
Species Reactivity	Human
Localization	Cell Surface

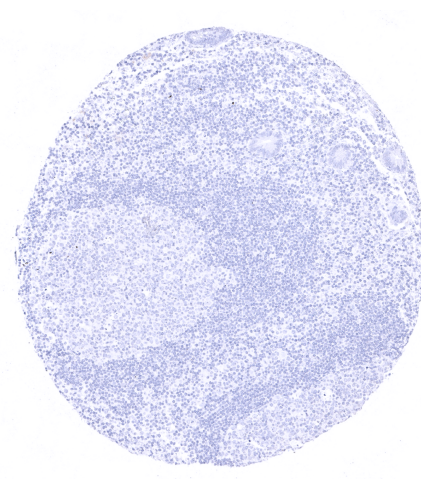
Storage & Stability	Antibody with azide – store at 2 to 8 C. Antibody without azide – store at -20 to -80 C. Antibody is stable for 24 months. Non-hazardous. No MSD required.
Supplied As	200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide.
Positive Control	In normal skin, Langerhans cells should show a strong CD1a staining.
Negative Control	In normal skin, Squamous epithelial cells and sebaceous glands cells must not show any CD1a immunostaining.



Strong CD1 immunostaining of Langerhans cells in squamous epithelium of the skin.



A strong CD1a immunostaining is seen in >80% of small lymphocytes in the thymic cortex.



Lymphatic and epithelial cells of the appendix completely lack CD1a immunostaining.

Biology

The CD1a protein is a transmembrane glycoprotein encoded by the CD1A gene on 1q23.1. It is a member of a family of 5 CD1 proteins that are structurally related to the major histocompatibility complex (MHC) proteins. It is the main role of CD1 proteins to present lipid and glycolipid antigens of self or microbial origin to T cells. The CD1 family members differ slightly in their specificity for particular lipid ligands in their cellular localization. CD1a is strongly expressed in Langerhans cells of the skin including hair follicles and sebaceous glands and in non-keratinizing squamous epithelial tissues. A strong CD1a immunostaining is also seen in >80% of the small lymphocytes of the thymic cortex but CD1a is virtually absent in any other lymphatic cells under normal conditions. CD1a expression regularly occurs in Langerhans cell histiocytosis but it can also be seen in T cell lymphoma (predominantly cutaneous) and in myeloid leukemia.

Potential Research Applications

- The role of CD1a positive cells in inflammatory and allergic disease is not fully understood.
- The frequency of CD1a immunostaining in Langerhans cell histiocytosis, other hematological and non-hematological neoplasms should be evaluated

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).

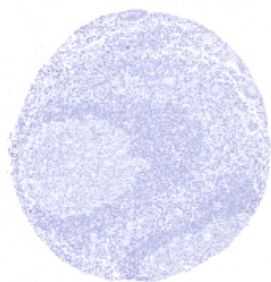
Limitations

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

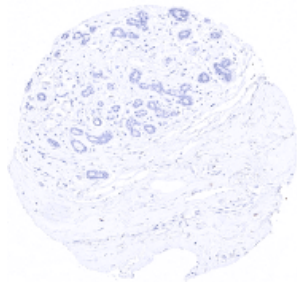
Not for resale without express authorization.

Warranty

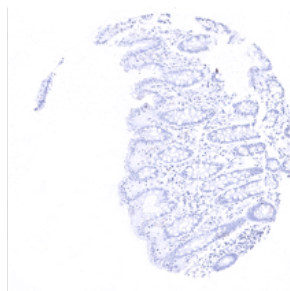
There are no warranties, expressed or implied, which extend beyond this description. MSVA is not liable for any personal injury or economic loss resulting from this product.



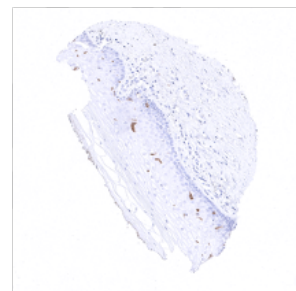
Appendix, mucosa



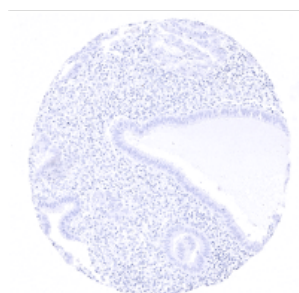
Breast



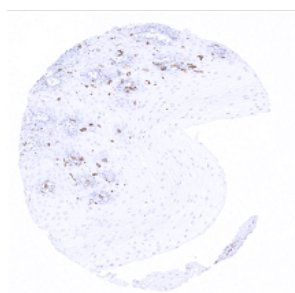
Colon descendens, mucosa



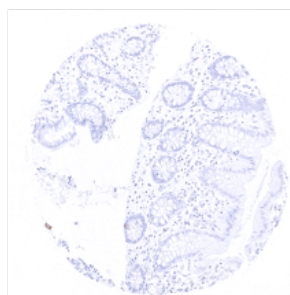
Ektocervix - Moderate CD1a positivity in Langerhans cells of the squamous epithelium of the ectocervix



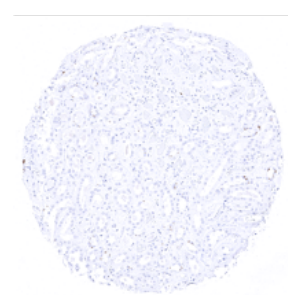
Endometrium, proliferation



Esophagus, squamous epithelium



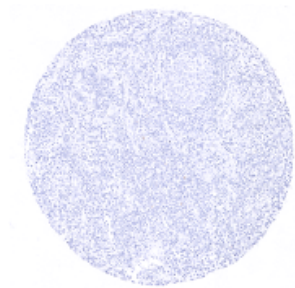
Ileum, mucosa



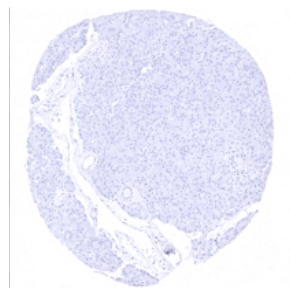
Kidney, medulla



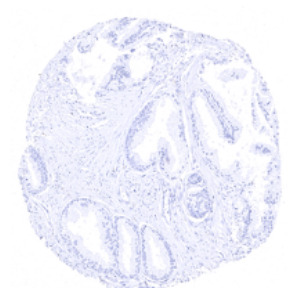
Lung



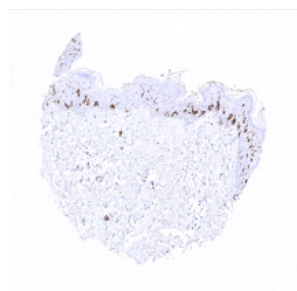
Lymph node - CD1a immunostaining is absent in normal lymph nodes



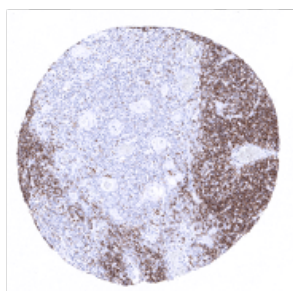
Pancreas



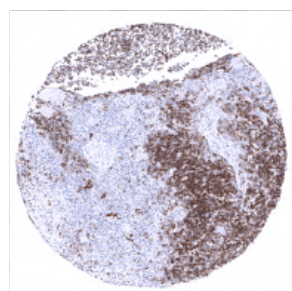
Prostate



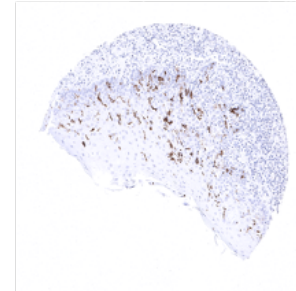
Skin - CD1a is strongly expressed in Langerhans cells of the skin



Thymus - CD1a immunostaining is absent in normal lymph nodes



Thymus - In the thymus, a strong CD1a positivity is seen in the majority of lymphocytes in cortex but in only few cells of the medulla



Tonsil, surface epithelium - Strong CD1a immunostaining in Langerhans cells of the squamous epithelium of the tonsil surface