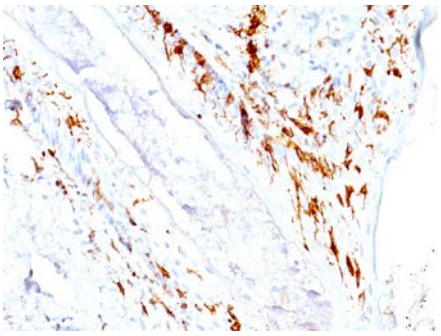
CD1a / HTA1 (Mature Langerhans Cells Marker): Clone O10 & C1A/711 (Concentrate)

Description:

Species:	Mouse
Immunogen:	Human thymus cells (O10); Recombinant human CD1a protein (C1A/711)
Clone:	O10 & C1A/711
Isotype:	IgG1, kappa (O10) & IgG1, kappa (C1A/711)
Entrez Gene ID:	909 (Human)
Hu Chromosome Loc.:	1q23.1
Synonyms:	Cortical thymocyte antigen CD1A, Epidermal dendritic cell marker CD1a, FCB6, HTA1, T-cell surface antigen T6 / Leu 6, T-Cell Surface Glycoprotein CD1A
Mol. Weight of Antigen:	49kDa
Format:	200µg/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide.
Specificity:	Anti-CD1a labels Langerhans cell histiocytosis (Histiocytosis X), extranodal histiocytic sarcoma, a subset of T-lymphoblastic lymphoma/leukemia, and interdigitating dendritic cell sarcoma of the lymph node.
Background:	At least five CD1 genes (CD1a, b, c, d, and e) are identified. CD1 proteins have been demonstrated to restrict T-cell response to non-peptide lipid and glycolipid antigens and play a role in non-classical antigen presentation. CD1a is a non-polymorphic MHC Class I related cell surface glycoprotein, expressed in association with Beta-2 microglobulin. When combined with antibodies against TTF-1 and CD5, anti-CD1a is useful in distinguishing between pulmonary and thymic neoplasms since CD1a is consistently expressed in thymic lymphocytes in both typical and atypical thymomas, but only focally in 1/6 of thymic carcinomas and not in lymphocytes in pulmonary neoplasms. Anti-CD1a is reported to be a new marker for perivascular epithelial cell tumor (PEComa).
Species Reactivity:	Human. Others not known.
Positive Control:	MOLT-4 cells. Paracortex in a tonsil or a reactive lymph node.
Cellular Localization:	Cell surface
Titer/ Working Dilution:	Immunohistochemistry (Frozen and Formalin-fixed): 0.5-1 µg/ml Flow Cytometry: 0.5-1 µg/million cells Immunofluorescence: 1-2µg/ml Western Blotting: 0.5-1 µg/ml Immunoprecipitation: 1-2 µg/500µg protein lysate
Microbiological State:	This product is not sterile.

Uses/Limitations:

Not to be taken internally.
For Research Use Only.
This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded tissue sections, to be viewed by light microscopy.
Do not use if reagent becomes cloudy.
Do not use past expiration date.
Non-Sterile.



Formalin-paraffin human skin stained with CD1a; Clone O10 & C1A/711.

Procedure: Staining of formalin fixed, paraffin embedded tissue sections is significantly enhanced by pretreatment with EDTA-based antigen retrieval, pH 8.0. We suggest an antibody incubation period of 30-60 minutes at room temperature or overnight at 2-8 C. However, depending upon the fixation conditions and the staining system employed, optimal incubation should be determined by the user. For maximum staining intensity, we recommend using AviBond Ultra for detection and DAB Clarity Ultra products for visualization.

Precautions: Contains Sodium Azide as a preservative (0.09% w/v).
Do not pipette by mouth.
Avoid contact of reagents and specimens with skin and mucous membranes.
Avoid microbial contamination of reagents or increased nonspecific staining may occur.
This product contains no hazardous material at a reportable concentration according to U.S. 29 CFR 1910.1200, OSHA Hazardous Communication Standard and EC Directive 91/155/EC.

Warranty: No products or "Instructions For Use (IFU)" are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our IFU or website. Our warranty is limited to the actual price paid for the product. Teomics is not liable for any property damage, personal injury, time or effort or economic loss caused by our products. Immunohistochemistry is a complex technique involving both histological and immunological detection methods. Tissue processing and handling prior to immunostaining can cause inconsistent results. Variations in fixation and embedding or the inherent nature of the tissue specimen may cause variations in results. Endogenous peroxidase activity or pseudoperoxidase activity in erythrocytes and endogenous biotin may cause non-specific staining depending on detection system used.

References:

1. McNally, AK. et al. 2011. Exp. Mol. Pathol. 91: 673-681.
2. Matsuda, A. et al. 2009. Invest. Ophthalmol. Vis. Sci. 50: 2871-2877.
3. Gulubova, M. et al. 2008. Clin. Exp. Metastasis. 25: 777-785.
4. Cassaday, RD. et al. 2007. Clin. Cancer Res. 13: 540-549.