

Anti-CD1a Antibody [A4B10]

HA600031



Product Type:	Mouse monoclonal IgG1, primary antibodies
Species reactivity:	Human
Applications:	IHC-P, FC
Molecular Wt:	Predicted band size: 37 kDa.
Clone number:	A4B10

Description: This gene encodes a member of the CD1 family of transmembrane glycoproteins, which are structurally related to the major histocompatibility complex (MHC) proteins and form heterodimers with beta-2-microglobulin. The CD1 proteins mediate the presentation of primarily lipid and glycolipid antigens of self or microbial origin to T cells. The human genome contains five CD1 family genes organized in a cluster on chromosome 1. The CD1 family members are thought to differ in their cellular localization and specificity for particular lipid ligands. The protein encoded by this gene localizes to the plasma membrane and to recycling vesicles of the early endocytic system. Alternative splicing results in multiple transcript variants.

Immunogen: Recombinant protein within human CD1a aa 50-250 (Extracellular).

Positive control: Human skin tissue, Jurkat.

Subcellular location: Cell membrane, endosome membrane, membrane raft.

Database links: SwissProt: P06126 Human

Recommended Dilutions:

IHC-P	1:100-1:500
FC	1:1,000

Storage Buffer: 1*PBS (pH7.4), 0.2% BSA, 50% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4°C. Store at +4°C short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20°C long term.

Purity: Immunogen affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

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Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

Images

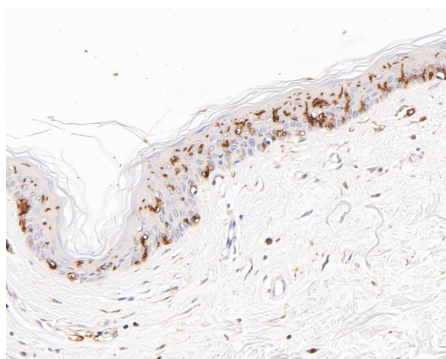


Fig1: Immunohistochemical analysis of paraffin-embedded human skin tissue using anti-CD1A antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes. The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (HA600031, 1/400) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

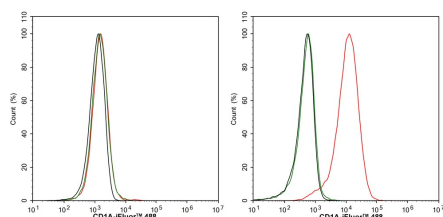


Fig2: Flow cytometric analysis of HeLa (left, negative) and Jurkat (right, positive) cells labeling CD1a.

Cells were washed twice with cold PBS and resuspend. Then stained with the primary antibody (HA600031, 1/1,000) (red) compared with Mouse IgG1 Isotype Control (green). After incubation of the primary antibody at +4 °C for an hour, the cells were stained with a iFluor™ 488 conjugate-Goat anti-Mouse IgG Secondary antibody (HA1125) at 1/1,000 dilution for 30 minutes at +4 °C. Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

Note: All products are “FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE”.

Background References

1. Maciocia PM. et. al. Anti-CD1a CAR T cells to selectively target T-ALL. Blood. 2019 May.
2. Ferrufino-Schmidt MC. et. al. Is CD1a useful for leishmaniasis diagnosis in the New World? J Cutan Pathol. 2019 Jan.

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