Anti-CD1a Antibody [JE28-74]

ET7110-48



Product Type: Recombinant Rabbit monoclonal IgG, primary antibodies

Species reactivity: Human

Applications: WB, IHC-P

Molecular Wt: Predicted band size: 37 kDa

Clone number: JE28-74

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. Alternatively spliced transcript variants

have been observed, but their biological validity has not been determined.

Immunogen: Synthetic peptide within Human CD1a aa 1-50 / 327.

Positive control: Human skin tissue lysate, human thymus tissue lysate, human skin tissue.

Subcellular location: Endosome membrane, cell membrane, membrane raft.

Database links: SwissProt: P06126 Human

Recommended Dilutions:

WB 1:500-1:2,000 **IHC-P** 1:50-1:200

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4° C. Store at $+4^{\circ}$ C short term (1-2 weeks). It is recommended to aliquot into

single-use upon delivery. Store at -20 °C long term.

Purity: Protein A affinity purified.

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Images

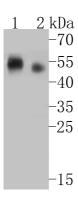


Fig1: Western blot analysis of CD1a on different lysates. Proteins were transferred to a PVDF membrane and blocked with 5% BSA in PBS for 1 hour at room temperature. The primary antibody (ET7110-48, 1/500) was used in 5% BSA at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:5,000 dilution was used for 1 hour at room temperature.

Positive control:

Lane 1: Human skin tissue lysate Lane 2: Human thymus tissue lysate

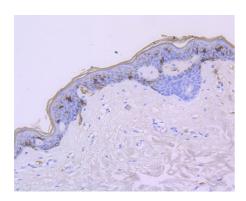


Fig2: Immunohistochemical analysis of paraffin-embedded human skin tissue using anti-CD1a antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes. The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (ET7110-48, 1/50) 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.

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

Background References

- 1. Al-Amodi O. et. al. CD1a-Expressing Monocytes as Mediators of Inflammation in Ulcerative Colitis. Inflamm Bowel Dis. 2018 May 17.
- 2. Carrera Silva EA. et. al. CD207+CD1a+ cells circulate in pediatric patients with active Langerhans cell histiocytosis. Blood. 2017 Oct 26;130(17):1898-1902.