

Anti-Mouse CD207 (Langerin) Purified

Catalog Number: 14-2075 Also Known As:CLEC4K RUO: For Research Use Only

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Mouse CD207-transfected (Lane 2) and untransfected control HEK 293T cell (Lane 1) lysates were immunoblotted with 1 μ g/mL of Anti-Mouse CD207 (Langerin) Purified and revealed with Anti-Rat IgG HRP

Product Information

Contents: Anti-Mouse CD207 (Langerin) Purified

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Clone: eBioL31

Concentration: 0.5 mg/ml Host/Isotype: Rat IgG2a Formulation: aqueous buffer, 0.09% sodium azide, may contain

carrier protein/stabilizer

Temperature Limitation: Store at 2-8°C.

LOT Batch Code: Refer to Vial

Use By: Refer to Vial

Caution, contains Azide

Description

The eBioL31 is a monoclonal antibody that reacts with mouse Langerin (CD207) which is expressed in a distinct subset of dendritic cells called Langerhans cells (LC). Mouse Langerin is a 48kDa C-type lectin transmembrane protein that likely plays a role in antigen recognition and uptake. Langerhans cells are located in the epidermis and upon activation, reduce Langerin expression and begin migrating through the dermis towards lymphatic vessels. Expression of mouse Langerin in LC has been correlated to the presence of Birbeck Granules. Furthermore, the formation of Birbeck Granules has been observed upon transfection of Langerin cDNA into fibroblast cell lines.

Western Blotting with eBioL31 reveals a 48kDa band in lysate from mouse ear epidermis, as well as in lysates from cells transfected with mouse Langerin cDNA. Preliminary data from mouse Langerin cDNA transfected cells suggests that eBioL31 can be used for intracellular flow cytometric analysis in combination with the Foxp3 bufer set (cat 00-5523). The epitope recognized by eBioL31 is in the extracellular domain within the CRD (carbohydrate recognition domain) and therefore can be used to detect both surface and intracellular langerin. Differences in expression has been observed between mouse strains.

Applications Reported

This eBioL31 antibody has been reported for use in flow cytometric analysis, intracellular staining followed by flow cytometric analysis, immunoprecipitation, immunoblotting (WB), and immunohistology staining of frozen tissue sections. (Fluorochrome conjugated eBioL31 is recommended for use in intracellular flow cytometry.)

Applications Tested

This eBioL31 antibody has been tested by flow cytometric analysis of transfected cells and western blotting or mouse ear lysates. This can be used at less than or equal to 1 μ g/ml for immunoblotting. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

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Cheong C, Idoyaga J, Do Y, Pack M, Park SH, Lee H, Kang YS, Choi JH, Kim JY, Bonito A, Inaba K, Yamazaki S, Steinman RM, Park CG. Production of monoclonal antibodies that recognize the extracellular domain of mouse Langerin/CD207. J Immunol Methods. 2008 Feb 29;331(1-2):27-38. (eBioL31, FC, IC, IP, IHC, WB PubMed)

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Visualization and characterization of migratory Langerhans cells in murine skin and lymph nodes by antibodies against Langerin/CD207. J Invest Dermatol. 2003 Feb;120(2):266-74.

Valladeau J, Clair-Moninot V, Dezutter-Dambuyant C, Pin JJ, Kissenpfennig A, Mattei MG, Ait-Yahia S, Bates EE, Malissen B, Koch F, Fossiez F, Romani N, Lebecque S, Saeland S. Identification of mouse langerin/CD207 in Langerhans cells and some dendritic cells of lymphoid tissues. J Immunol. 2002 Jan 15;168(2):782-92.

Related Products

11-4317 Streptavidin FITC

11-4811 Anti-Rat IgG FITC

12-4317 Streptavidin PE

13-4813 Anti-Rat IgG Biotin (Polyclonal)

14-2073 Anti-Mouse CD207 (Langerin) Purified (eBioRMUL.2)

14-4321 Rat IgG2a K Isotype Control Purified

17-4317 Streptavidin APC

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