Monoclonal Anti-human Langerin/CD207-Phycoerythrin

Catalog Number: FAB2088P
Lot Number: AAGN02
100 Tests

Reagents Provided

Phycoerythrin (PE)-conjugated mouse monoclonal anti-human Langerin/CD207: Supplied as 25 μg of antibody in 1 mL saline containing up to 0.5% BSA and 0.1% sodium azide.

Clone #: 343828

Isotype: mouse IgG_1

Reagents Not Provided

- Flow Cytometry Staining Buffer (Catalog # FC001) or other BSA-supplemented saline buffer.

Storage

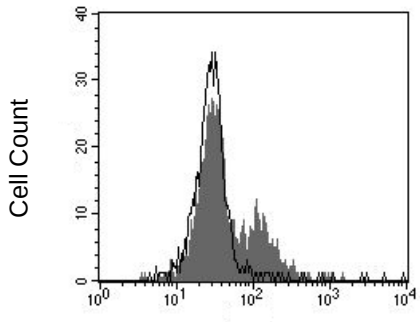
Reagents are stable for **twelve months** from date of receipt when stored in the dark at 2° - 8° C.

Intended Use

Designed to quantitatively determine the percentage of cells bearing Langerin/CD207 within a population and qualitatively determine the density of Langerin/CD207 on cell surfaces by flow cytometry.

Product Description

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, NS0-derived, recombinant human Langerhans cell specific C-type lectin (rhLangerin; aa 64 - 328; Accession # NP_056532). The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography. The purified antibody was then conjugated to PE fluorochrome. Cell surface expression of Langerin/CD207 is determined by flow cytometry using 488 nm wavelength excitation and monitoring emitted fluorescence with a detector optimized to collect peak emissions at 565 - 605 nm.



Langerin/CD207-PE

Monocyte-derived Langerhans dendritic cells were stained with PE-conjugated anti-human Langerin/CD207 (Catalog # FAB2088P, filled histogram) or isotype control (Catalog # IC002P, open histogram).

Background Information

Langerin is a type II transmembrane protein with a single extracellular C-type lectin domain. It is a Langerhans cell restricted protein that plays a role as an endocytic receptor.

Flow Cytometry Validation

This antibody has been tested for flow cytometry using human monocyte-derived Langerhans dendritic cells [Caux, C. *et al.* (1999) J. Leuk. Biol. **66**:781].

1. Cells may be Fc-blocked with 1 μg of human IgG/10^5 cells for 15 minutes at room temperature. Do not wash excess blocking IgG from this reaction.
2. After blocking, 10 μL of conjugated antibody was added to 1 - 2.5 x 10^5 cells and incubated for 30 minutes at room temperature.
3. Unbound antibody was removed by washing the cells twice in Flow Cytometry Staining Buffer (Catalog # FC001). Note that whole blood requires a RBC lysis step at this point using Flow Cytometry Human Lyse Buffer (Catalog # FC002).
4. The cells were resuspended in Flow Cytometry Staining Buffer for analysis by flow cytometry. As a control for this analysis, cells in a separate tube should be treated with PE-labeled mouse IgG_1 antibody. This procedure may need to be modified, depending upon cell type and final utilization. Individual users may need to titrate to determine optimal reagent amount for their specific use.

Warning: Contains sodium azide as a preservative - sodium azide may react with lead and copper plumbing to form explosive metal azides. Flush with large volumes of water during disposal.

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