Monoclonal Anti-human DEC-205-PerCP

Catalog Number: FAB2047C
Lot Number: ABDS01
100 Tests

Reagents Provided

Peridinin-Chlorophyll-Protein-Complex (PerCP)-conjugated mouse monoclonal anti-human DEC-205: Supplied as 10 μg of antibody in 1 mL saline containing up to 0.5% BSA and 0.1% sodium azide.

Clone #: 523203

Isotype: mouse IgG_1

Reagents Not Provided

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

Storage

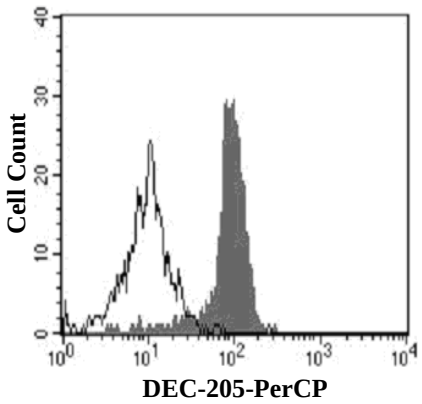
Reagents are stable for **twelve months** from the date of receipt when stored in the dark at 2° - 8° C.

Intended Use

Designed to quantitatively determine the percentage of cells bearing DEC-205 within a population and qualitatively determine the density of DEC-205 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, *E. coli*-derived, recombinant human DEC-205 (rhDEC-205; aa 216 - 501; Accession # O60449). The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography. The purified antibody was then conjugated to PerCP fluorochrome. Cell surface expression of DEC-205 is determined by flow cytometry. PerCP has a maximum absorption of 482 nm and 564 nm and a maximum emission of 675 nm.



Human monocytes were stained with PerCP-conjugated anti-human DEC-205 (Catalog # FAB2047C, filled histogram) or isotype control (Catalog # IC002C, open histogram).

Background Information

DEC-205, also known as CD205 and lymphocyte antigen 75 (Ly 75), is a type I transmembrane protein that is primarily expressed on dendritic cells and thymic epithelial cells. The extracellular region of DEC-205 contains ten C-type lectin-like domains, a fibronectin type II domain and a ricin B-type lectin domain. DEC-205 functions as an endocytic receptor for antigens. The recombinant protein used to generate the anti-human DEC-205 antibody contains the first two C-type lectin domains.

Flow Cytometry Validation

This antibody has been tested for flow cytometry using human monocytes.

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 final flow cytometric analysis. As a control for this analysis, cells in a separate tube should be treated with PerCP-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 the 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.

R&D Systems Inc.
1-800-343-7475