

Reagents Provided

Peridinin-Chlorophyll-Protein-Complex (PerCP)-conjugated rat monoclonal anti-mouse Dectin-1/CLEC7A: Supplied as 25 µg of antibody in 1 mL saline containing up to 0.5% BSA and 0.1% sodium azide.

Clone #: 218820

Isotype: rat IgG_{2A}

Reagents Not Provided

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

Storage

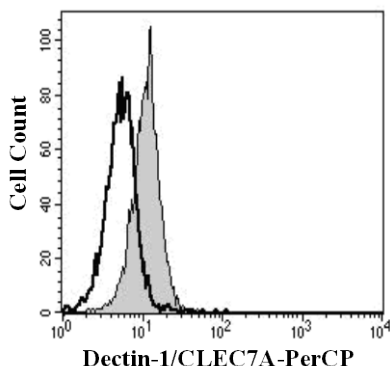
Reagents are stable for **twelve months** from the date of receipt when stored in the dark at 2° - 8° C.

Intended Use

Designed to quantitatively determine the percentage of cells bearing Dectin-1/CLEC7A within a population and qualitatively determine the density of Dectin-1/CLEC7A 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 rat immunized with purified, NS0-derived, recombinant mouse Dectin-1 (rmDectin-1; aa 69 - 244) extracellular domain. 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 Dectin-1/CLEC7A is determined by flow cytometry. PerCP has a maximum absorption of 482 nm and 564 nm and a maximum emission of 675 nm.



RAW264.7 cells were stained with PerCP-conjugated anti-mouse Dectin-1/CLEC7A (Catalog # FAB17561C, filled histogram) or PerCP-conjugated rat isotype control (Catalog # IC006C, open histogram).

FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

Background Information

Dectin-1 is a C-type lectin expressed primarily on dendritic cells, macrophages, and neutrophils, and is now designated CLEC7A. It is a type II transmembrane protein that binds β-glucans on fungal pathogens and initiates inflammatory immune responses.

Flow Cytometry Validation

This antibody has been tested for flow cytometry using RAW264.7 cells.

- Cells may be Fc-blocked with 1 µg of mouse IgG/10⁵ cells for 15 minutes at room temperature. Do not wash excess blocking IgG from this reaction.
- After blocking, 10 µL of conjugated antibody was added to up to 1 x 10⁶ cells and incubated for 30 minutes at room temperature.
- 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 Mouse Lyse Buffer (Catalog # FC003).
- 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 rat IgG_{2A} antibody. This procedure may need to be modified, depending upon the 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.