

Monoclonal Anti-human ENPP-3/CD203c-Fluorescein

Catalog Number: FAB5756F

Lot Number: ABDK01

100 Tests

Reagents Provided

Carboxyfluorescein (CFS)-conjugated mouse monoclonal anti-human CD203c: Supplied as 25 µg of antibody in 1 mL saline containing up to 0.5% BSA and 0.1% sodium azide.

Clone #: NP4D6

Isotype: mouse IgG₁

Reagents Not Provided

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

Storage

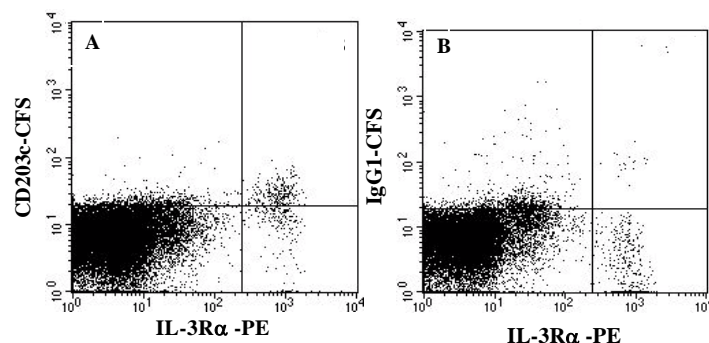
Reagents are stable for **twelve months** from the date of receipt when stored in the dark at 2° - 8° C.

Intended Use

Designed to quantitatively determine the percentage of cells bearing CD203c within a population and qualitatively determine the density of CD203c 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 human ENPP-3 transfected HEK-293 cells (rhENPP-3: Accession # O14638). The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography. The purified antibody was then conjugated to CFS fluorochrome. Cell surface expression of CD203c is determined by flow cytometry using 488 nm wavelength excitation and monitoring emitted fluorescence with a detector optimized to collect peak emissions at 515 - 545 nm.



Human whole blood lymphocytes and monocytes were stained with A) CFS-conjugated anti-human CD203c (Catalog # FAB5756F) or B) isotype control (Catalog # IC002F) and PE-conjugated anti-human IL-3 Rα (Catalog # FAB301P).

Background Information

CD203c is a 150 kDa type II transmembrane glycoprotein with a short cytoplasmic tail. CD203c is also known as ectonucleotide pyrophosphatase/phosphodiesterase 3 (ENPP-3) and modulates purinergic signaling by hydrolysis of nucleotide triphosphates. CD203c is expressed on activated basophils and mast cells during allergic reactions, cardiac muscle cells, hepatocytes, and epithelial cells. It is upregulated in colon and bile duct carcinomas. Within the ECD, human CD203c shares 81% amino acid sequence identity with mouse and rat CD203.

Flow Cytometry Validation

This antibody has been tested for flow cytometry using whole blood lymphocytes and monocytes.

Cells may be Fc-blocked with 1 µg of human 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 1 - 2.5 x 10⁵ 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 Human Lyse Buffer (Catalog # FC002).
- 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 CFS-labeled mouse IgG₁ 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.

FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

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