Polyclonal
Anti-mouse Integrin α3/CD49c-Phycoerythrin

Catalog Number: FAB2787P
Lot Number: AAWF01
100 Tests

Reagents Provided

Phycoerythrin (PE)-conjugated goat polyclonal anti-mouse Integrin α3/CD49c: Supplied as 25 μg of antibody in 1 mL saline containing up to 0.5% BSA and 0.1% sodium azide.

Antibody type: goat IgG

Reagents Not Provided

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

Storage

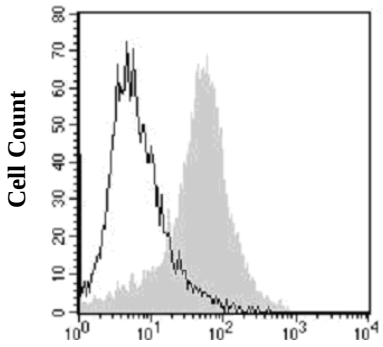
Reagents are stable for **twelve months** from date of receipt when stored in the dark at 2° - 8° C.

Intended Use

Designed to quantitatively determine the percentage of cells bearing Integrin α3/CD49c within a population and qualitatively determine the density of Integrin α3/CD49c on cell surfaces by flow cytometry.

Product Description

This antibody was produced in goats immunized with purified, *Sf* 21-derived recombinant mouse Integrin α3 extracellular domain (rmIntegrin α3; aa 33 - 993; Accession # Q62470). Mouse Integrin α3 specific IgG was purified by mouse Integrin α3 affinity chromatography. The affinity purified antibody was then conjugated to PE fluorochrome. Cell surface expression of Integrin α3/CD49c 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.



XB-2 cells were stained with PE-conjugated anti-mouse Integrin α3/CD49c (Catalog # FAB2787P, filled histogram) or control (Catalog # IC108P, open histogram).

Background Information

Integrin α3, also known as CD49c and VLA-3α, is a type I membrane protein that heterodimerizes with Integrin β1. α3β1 is a cell surface adhesion molecule that functions as a receptor for laminin, fibronectin, collagen, epiregulin, thrombospondin and chondroitan sulfate proteoglycan 4. The extracellular domains of human and mouse Integrin α3 share approximately 87% amino acid sequence homology.

Flow Cytometry Validation

This antibody has been tested for flow cytometry using XB-2 cells.

1. Cells were Fc-blocked with 1 μg of mouse 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 Mouse Lyse Buffer (Catalog # FC003).
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 PE-labeled goat IgG 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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