R&D SystemsTools for Cell Biology Research™

Human/Canine Integrin β1/CD29 Antibody

Antigen Affinity-purified Polyclonal Goat IgG Catalog Number: AF1778

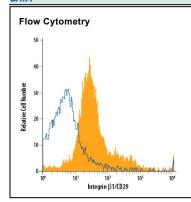
| DESCRIPTION | | | |
|--------------------|--|--|--|
| Species Reactivity | Human/Canine | | |
| Specificity | Detects human Integrin β 1 in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 25% cross-reactivity with recombinant mouse (rm) Integrin β 1 is observed and less than 1% cross-reactivity with recombinant human (rh) Integrin β 2, rhIntegrin β 3, rmIntegrin β 6, and rmIntegrin β 7 is observed. | | |
| Source | Polyclonal Goat IgG | | |
| Purification | Antigen Affinity-purified | | |
| Immunogen | Chinese hamster ovary cell line CHO-derived recombinant human Integrin β1 isoform 1A Gln21-Asp728 Accession # P05556 | | |
| Formulation | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS. | | |

APPLICATIONS

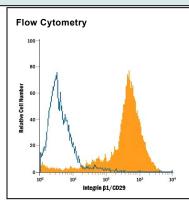
Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

| | Recommended Concentration | Sample |
|---------------------|------------------------------|------------------------------------|
| Western Blot | 0.1 μg/mL | Recombinant Human Integrin β1/CD29 |
| Flow Cytometry | 2.5 µg/10 ⁶ cells | See Below |
| Immunocytochemistry | 5-15 μg/mL | See Below |

DATA



Detection of Integrin β1/CD29 in Canine PBMCs by Flow Cytometry. Canine peripheral blood mononuclear cells (PBMCs) were stained with Goat Anti-Human/Canine Integrin β1/CD29 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1778, filled histogram) or isotype control antibody (Catalog # AB-108-C, open histogram), followed by Phycoerythrin-conjugated Anti-Goat IgG Secondary Antibody (Catalog # F0107).



Detection of Integrin β1/CD29 in Canine Mesenchymal Stem Cells by Flow Cytometry. Canine mesenchymal stem cells were stained with Goat Anti-Human/Canine Integrin β1/CD29 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1778, filled histogram) or isotype control antibody (Catalog # AB-108-C, open histogram), followed by Phycoerythrin-conjugated Anti-Goat IgG Secondary Antibody (Catalog # F0107).



Integrin $\beta 1/CD29$ in Human Mesenchymal Stem Cells. Integrin $\beta 1/CD29$ was detected in immersion fixed human mesenchymal stem cells using Goat Anti-Human/Canine Integrin $\beta 1/CD29$ Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1778) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights $^{\text{TM}}$ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). Specific staining was localized to cell surfaces. View our protocol for Fluorescent ICC Staining of Stem Cells on Coverslips.

Immunocytochemistry

Integrin β1/CD29 in Canine Mesenchymal Stem Cells. Integrin β1/CD29 was detected in immersion fixed canine mesenchymal stem cells using Goat Anti-Human/Canine Integrin β1/CD29 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1778) at 10 μg/mL for 3 hours at room temperature. Cells were stained using the NorthemLights ™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). Specific staining was localized to cell surfaces. View our protocol for Fluorescent ICC Staining of Stem Cells on Coverslips.

PREPARATION AND STORAGE

Reconstitution Reconstitute at 0.2 mg/mL in sterile PBS.

Shipping The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Integrin β 1, also called CD29 and VLA- β chain, associates with at least ten different integrin α subunits to form various VLA complexes. The β 1 subunit has a broad tissue distribution except erythrocytes. Over aa 21-720, human Integrin β 1 shares 95% aa identity with canine Integrin β 1.

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