

## DESCRIPTION

<b>Species Reactivity</b>	Mouse/Rat
<b>Specificity</b>	Detects mouse Integrin $\beta$ 1/CD29 in direct ELISAs. Detects mouse and rat Integrin $\beta$ 1/CD29 in Western blots. In direct ELISAs, approximately 5% cross-reactivity with recombinant human (rh) Integrin $\beta$ 1 and rhIntegrin $\beta$ 3 is observed and less than 1% cross-reactivity with recombinant mouse (rm) Integrin $\beta$ 2, rmIntegrin $\beta$ 4, and rmIntegrin $\beta$ 6 is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Chinese hamster ovary cell line CHO-derived recombinant mouse Integrin $\beta$ 1 Gln21-Ala738 Accession # P09055
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 $\mu$ m filtered solution in PBS.

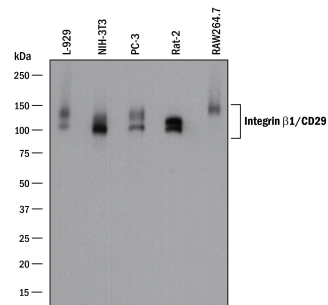
## APPLICATIONS

**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
<b>Western Blot</b>	1 $\mu$ g/mL	See Below
<b>Flow Cytometry</b>	2.5 $\mu$ g/10 <sup>6</sup> cells	B16-F10 mouse melanoma cell line
<b>Immunohistochemistry</b>	5-15 $\mu$ g/mL	See Below
<b>Simple Western</b>	10 $\mu$ g/mL	See Below
<b>CyTOF-ready</b>	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

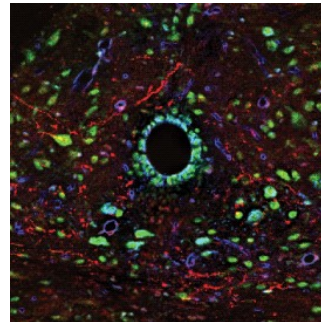
## DATA

### Western Blot



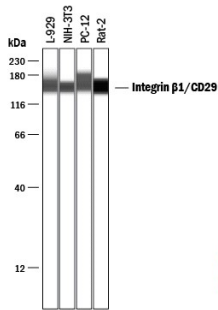
**Detection of Mouse and Rat Integrin  $\beta$ 1/CD29 by Western Blot.**  
Western blot shows lysates of L-929 mouse fibroblast cell line, NIH-3T3 mouse embryonic fibroblast cell line, PC-3 human prostate cancer cell line, Rat-2 rat embryonic fibroblast cell line, and RAW 264.7 mouse monocyte/macrophage cell line. PVDF membrane was probed with 1  $\mu$ g/mL of Goat Anti-Mouse/Rat Integrin  $\beta$ 1/CD29 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2405) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for Integrin  $\beta$ 1/CD29 at approximately 110-140 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

### Immunohistochemistry



**Orexin B, p38 $\alpha$ , & Integrin beta 1 in Mouse Brainstem.** Orexin B, p38 $\alpha$ , and Integrin  $\beta$ 1 were detected in perfusion fixed frozen sections of mouse brainstem using Human Orexin B Monoclonal Antibody (red; Catalog # MAB734), Human/Mouse/Rat p38 $\alpha$  Antigen Affinity-purified Polyclonal Antibody (green; Catalog # AF8691), and Mouse/Rat Integrin  $\beta$ 1 Antigen Affinity-purified Polyclonal Antibody (blue; Catalog # AF2405). Tissue was incubated with primary antibodies overnight at 4  $^{\circ}$ C. Tissue was stained using NorthernLights™ 493-conjugated Anti-Rabbit IgG Secondary Antibody (green; Catalog # NL006), NorthernLights 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007), and NorthernLights 637-conjugated Anti-Goat IgG Secondary Antibody (blue; Catalog # NL002). The image of Integrin beta 1 is pseudo-colored for presentation. View our protocol for [Fluorescent IHC Staining of Frozen Tissue Sections](#).

**Simple Western**



**Detection of Mouse and Rat Integrin  $\beta$ 1/CD29 by Simple Western™.**  
Simple Western lane view shows lysates of L-929 mouse fibroblast cell line, NIH-3T3 mouse embryonic fibroblast cell line, PC-12 rat adrenal pheochromocytoma cell line, and Rat-2 rat embryonic fibroblast cell line, loaded at 0.2 mg/mL. A specific band was detected for Integrin  $\beta$ 1/CD29 at approximately 153-174 kDa (as indicated) using 10  $\mu$ g/mL of Goat Anti-Mouse/Rat Integrin  $\beta$ 1/CD29 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2405) followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**BACKGROUND**

The Integrin  $\beta$ 1 subunit, also known as CD29, associates with multiple distinct Integrin  $\alpha$  subunits. The Integrin  $\beta$ 1 subunit has a broad tissue distribution with the exception of erythrocytes.