

## DESCRIPTION

<b>Species Reactivity</b>	Mouse/Rat
<b>Specificity</b>	Detects mouse and rat Integrin $\alpha 8$ in Western blots. In direct ELISAs and Western blots, approximately 30% cross-reactivity with recombinant human (rh) Integrin $\alpha 8$ is observed, and less than 1% cross-reactivity with rhIntegrin $\alpha 5$ , recombinant mouse (rm) Integrin $\alpha 5$ , rhIntegrin $\alpha V$ and rmIntegrin $\alpha V$ 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 $\alpha 8$ Phe38-Phe1007 Accession # A28ARA8
<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.

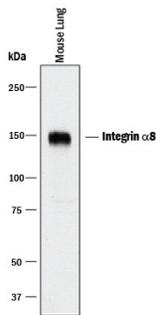
## APPLICATIONS

**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>	0.25 $\mu$ g/mL	See Below
<b>Flow Cytometry</b>	0.25 $\mu$ g/ $10^6$ cells	4T1 mouse breast cancer cell line
<b>Immunocytochemistry</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.	

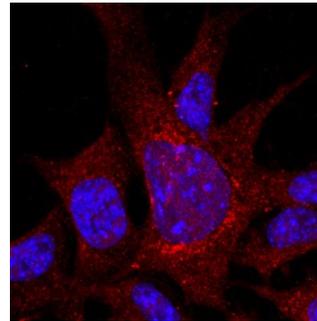
## DATA

### Western Blot



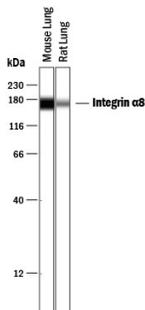
**Detection of Mouse Integrin  $\alpha 8$  by Western Blot.** Western blot shows lysates of mouse lung tissue. PVDF membrane was probed with 0.25  $\mu$ g/mL of Goat Anti-Mouse/Rat Integrin  $\alpha 8$  Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4076) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for Integrin  $\alpha 8$  at approximately 150 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

### Immunocytochemistry



**Integrin  $\alpha 8$  in 4T1 Mouse Breast Cancer Cell Line.** Integrin  $\alpha 8$  was detected in immersion fixed 4T1 mouse breast cancer cell line using Goat Anti-Mouse/Rat Integrin  $\alpha 8$  Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4076) at 10  $\mu$ g/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI(blue). Specific staining was localized to cytoplasm and cell surface. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

### Simple Western



**Detection of Mouse and Rat Integrin  $\alpha 8$  by Simple Western™.** Simple Western lane view shows lysates of mouse lung tissue and rat lung tissue, loaded at 0.2 mg/mL. A specific band was detected for Integrin  $\alpha 8$  at approximately 150 kDa (as indicated) using 10  $\mu$ g/mL of Goat Anti-Mouse/Rat Integrin  $\alpha 8$  Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4076) 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>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <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

Integrin alpha 8 is a 170-200 kDa member of the Integrin family of adhesion molecules. It forms an exclusive noncovalent heterodimer with Integrin  $\beta 1$ .  $\alpha 8\beta 1$  promotes both cell adhesion and survival and is known to bind to fibronectin, the latency-associated peptide in latent TGF- $\beta 1$  and nephronectin. Mouse Integrin  $\alpha 8$  is a 1025 amino acid (aa) type I transmembrane glycoprotein. It contains a 969 aa extracellular region (aa 38-1006) and a 29 aa cytoplasmic domain. One isoform may exist that shows a truncation after Ala675 of the precursor. In the ECD, mouse Integrin  $\alpha 8$  shares 96% and 90% aa sequence identity with rat and human Integrin  $\alpha 8$  protein, respectively.