

## DESCRIPTION

<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse Integrin $\alpha$ 11 in direct ELISAs and Western blots. In direct ELISAs, approximately 35% cross-reactivity with recombinant human (rh) Integrin $\alpha$ 11 is observed, and less than 2% cross-reactivity with rhIntegrin $\alpha$ 2 and rhIntegrin $\alpha$ 10 is observed.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Chinese hamster ovary cell line CHO-derived recombinant mouse Integrin $\alpha$ 11 Phe19-Pro1141 Accession # P61622
<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 as a 0.2 $\mu$ m filtered solution in PBS.

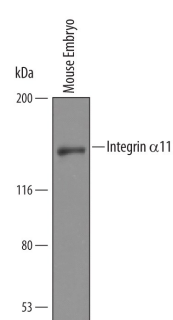
## APPLICATIONS

**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>Immunocytochemistry</b>	5-15 $\mu$ g/mL	See Below

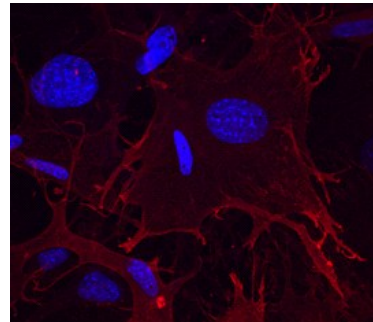
## DATA

### Western Blot



**Detection of Mouse Integrin  $\alpha$ 11 by Western Blot.** Western blot shows lysates of mouse embryo tissue. PVDF Membrane was probed with 1  $\mu$ g/mL of Mouse Integrin  $\alpha$ 11 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6498) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Integrin  $\alpha$ 11 at approximately 160 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.

### Immunocytochemistry



**Integrin alpha 11 in Mouse Embryonic Fibroblasts (IMEF).** Integrin alpha 11 was detected in immersion fixed irradiated mouse embryonic fibroblasts (IMEF) using Mouse Integrin alpha 11 Affinity-purified Polyclonal Antibody (Catalog # AF6498) at 1  $\mu$ g/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (red; Catalog # NL010) and counterstained with DAPI (blue). Specific staining was localized to cell surfaces. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.2 mg/mL.
<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  $\alpha$ 11 (ITGA11) is a 155-160 kDa member of the integrin alpha chain family of molecules. It preferentially forms a cell surface heterodimer with  $\beta$ 1 Integrin. In particular, it is further classified as a collagen-binding group member, showing a preference for binding to collagen I and II, plus group A Streptococcal Sc11 protein. ITGA11 is expressed by embryonic mesenchymal cells in areas that incorporate collagen during development. In adult tissue, fibroblasts express ITGA11, and a collagen:ITGA11 interaction likely contributes to the formation of myofibroblasts. Mature mouse ITGA11 is an 1166 amino acid (aa) type I transmembrane glycoprotein. It contains a large 1119 aa extracellular domain (ECD) (aa 23-1141) plus a short 24 aa cytoplasmic region. The ECD shows 7 x 60 aa FG-Gap repeats that generate  $\beta$ -propellers (aa 24-650) with an intervening I domain that binds collagen (aa 164-345). There is one potential splice variant that shows an eight aa substitution for aa 89-119 coupled to a seven aa insertion after Gly690. Over aa 23-1141, mouse ITGA11 shares 95% and 90% aa identity with rat and human ITGA11, respectively.