

# Mouse Integrin a11 Antibody

Antigen Affinity-purified Polyclonal Sheep IgG Catalog Number: AF6498

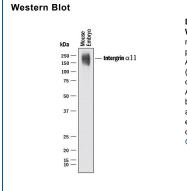
DESCRIPTION			
Species Reactivity	Mouse		
Specificity	Detects mouse Integrin α11 in direct ELISAs and Western blots. In direct ELISAs, approximately 30% cross-reactivity with recombinant human (rh) Integrin α11 is observed, and less than 2% cross-reactivity with recombinant mouse (rm) Integrin α2 and rmIntegrin α10 is observed.		
Source	Polyclonal Sheep IgG		
Purification	Antigen Affinity-purified		
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant mouse Integrin α11 Phe19-Pro1141 Accession # P61622		
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 either lyophilized or 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.

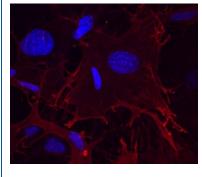
	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunocytochemistry	5-15 µg/mL	See Below

#### DATA



Detection of Mouse Integrin a11 by Western Blot. Western blot shows lysates of mouse embryo tissue. PVDF Membrane was probed with 1 µg/mL of Mouse Integrin a11 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6498) followed by HRPconjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Integrin a11 at approximately 230 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

#### 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 Affinitypurified Polyclonal Antibody (Catalog # AF6498) at 1 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights<sup>TI</sup> 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		
Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.	
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	
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul> <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.

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Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956 USA TEL 800 343 7475 Canada TEL 855 668 8722 China TEL +86 (21) 52380373 Europe | Middle East | Africa TEL +44 (0)1235 529449