

## DESCRIPTION

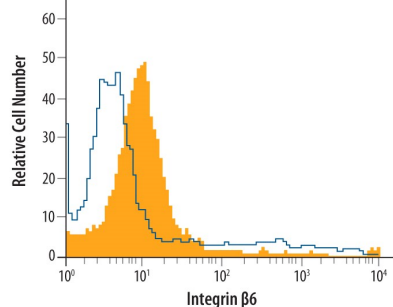
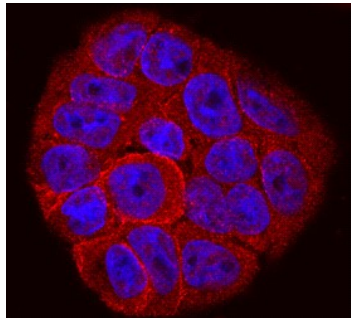
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Integrin $\beta 6$ in the direct ELISAs and Western blots. In direct ELISAs, approximately 35% cross-reactivity with recombinant mouse Integrin $\beta 6$ is observed and less than 5% cross-reactivity with recombinant human (rh) Integrin $\beta 3$ and rhIntegrin $\beta 5$ is observed.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human Integrin $\beta 6$ Gly22-Asn707 Accession # P18564
<b>Formulation</b>	Lyophilized from a 0.2 $\mu\text{m}$ 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 $\mu\text{m}$ 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>	0.1 $\mu\text{g}/\text{mL}$	Recombinant Human Integrin $\beta 6$
<b>Flow Cytometry</b>	2.5 $\mu\text{g}/10^6$ cells	See Below
<b>Immunocytochemistry</b>	5-15 $\mu\text{g}/\text{mL}$	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

Flow Cytometry	Immunocytochemistry
 <p><b>Detection of Integrin <math>\beta 6</math> in HT-29 Human Cell Line by Flow Cytometry.</b> HT-29 human colon adenocarcinoma cell line was stained with Sheep Anti-Human Integrin <math>\beta 6</math> Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4155, filled histogram) or isotype control antibody (Catalog # 5-001-A, open histogram), followed by NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # NL010).</p>	 <p><b>Integrin <math>\beta 6</math> in HT-29 Human Cell Line.</b> Integrin <math>\beta 6</math> was detected in immersion fixed HT-29 human colon adenocarcinoma cell line using Sheep Anti-Human Integrin <math>\beta 6</math> Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4155) at 10 <math>\mu\text{g}/\text{mL}</math> 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 cytoplasm and cell surface. View our protocol for <a href="#">Fluorescent ICC Staining of Cells on Coverslips</a>.</p>

## 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  $\beta 6$  (ITG $\beta 6$ ) is a 95 kDa member of the Integrin beta family. It forms noncovalent heterodimers with Integrin  $\alpha V$  and appears on epithelia following injury or inflammation. It activates TGF- $\beta$  and assists keratinocyte migration. Human Integrin  $\beta 6$  is a type I transmembrane glycoprotein that is 767 aa in length. It contains a 688 aa extracellular domain (ECD) (aa 22-709) that incorporates a 241 aa VWF-A domain. Over aa 22-707, human integrin  $\beta 6$  ECD shares 90% and 93% aa sequence identity with mouse and pig integrin  $\beta 6$  ECD, respectively.