

DESCRIPTION

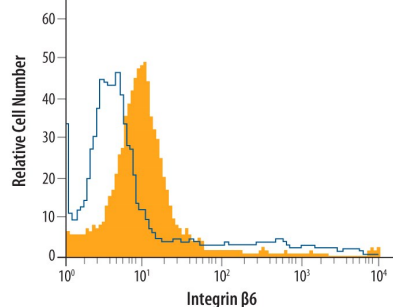
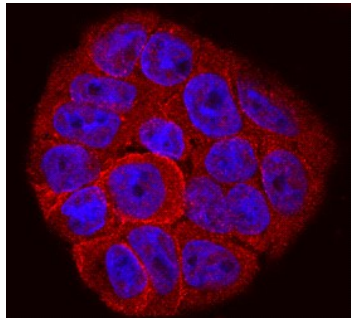
Species Reactivity	Human
Specificity	Detects human Integrin $\beta 6$ in the direct ELISAs and Western blots. In direct ELISAs, approximately 35% cross-reactivity with recombinant mouse Integrin $\beta 6$ is observed and less than 5% cross-reactivity with recombinant human (rh) Integrin $\beta 3$ and rhIntegrin $\beta 5$ is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Integrin $\beta 6$ Gly22-Asn707 Accession # P18564
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 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	0.1 $\mu\text{g}/\text{mL}$	Recombinant Human Integrin $\beta 6$
Flow Cytometry	2.5 $\mu\text{g}/10^6$ cells	See Below
Immunocytochemistry	5-15 $\mu\text{g}/\text{mL}$	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA

Flow Cytometry	Immunocytochemistry
 <p>Detection of Integrin $\beta 6$ in HT-29 Human Cell Line by Flow Cytometry. HT-29 human colon adenocarcinoma cell line was stained with Sheep Anti-Human Integrin $\beta 6$ 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>Integrin $\beta 6$ in HT-29 Human Cell Line. Integrin $\beta 6$ was detected in immersion fixed HT-29 human colon adenocarcinoma cell line using Sheep Anti-Human Integrin $\beta 6$ Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4155) at 10 $\mu\text{g}/\text{mL}$ 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 cytoplasm and cell surface. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.</p>

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
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 style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Integrin $\beta 6$ (ITG $\beta 6$) is a 95 kDa member of the Integrin beta family. It forms noncovalent heterodimers with Integrin αV and appears on epithelia following injury or inflammation. It activates TGF- β 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.