

DESCRIPTION

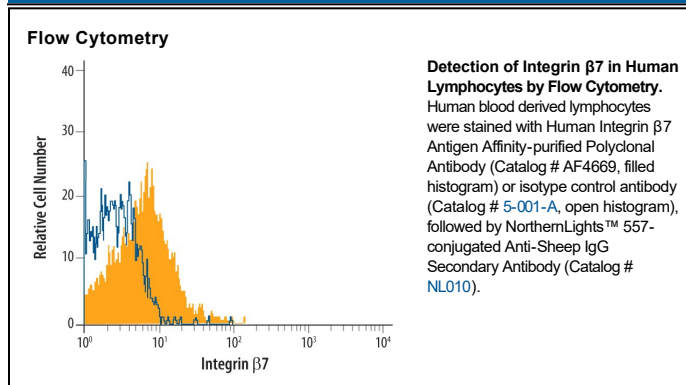
Species Reactivity	Human
Specificity	Detects human Integrin $\beta 7$ in direct ELISAs and Western blots. In direct ELISAs, approximately 20% cross-reactivity with recombinant mouse Integrin $\beta 7$ is observed and less than 1% cross-reactivity with recombinant human (rh) Integrin $\beta 2$, rhIntegrin $\beta 5$, and rhIntegrin $\beta 6$ is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human Integrin $\beta 7$ long isoform Glu20-His723 Accession # P26010
Formulation	Lyophilized from a 0.2 μ 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 μ 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
Western Blot	0.1 μ g/mL	Recombinant Human Integrin $\beta 7$
Flow Cytometry	0.25 μ g/ 10^6 cells	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA



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

Human Integrin $\beta 7$ (also Integrin βP and M290 IEL Ag) is a 120 kDa member of the Integrin beta chain family of molecules. It is a type I transmembrane glycoprotein that contains a 704 amino acid (aa) extracellular domain (ECD) (aa 20-723) and a 52 aa cytoplasmic tail. The ECD contains one von Willebrand factor A domain (aa 150-389) and four cysteine-rich EGF-like repeats. One splice variant exists that shows a deletion of aa 501-648. Integrin $\beta 7$ forms a nondisulfide linked heterodimer with $\alpha 4$ and αE integrins. $\alpha 4\beta 7$ binds fibronectin, VCAM-1, and MADCAM1, while $\alpha E\beta 7$ binds E-cadherin. The ECD of human $\beta 7$ is 87% aa identical to the ECD of mouse $\beta 7$.