

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Integrin $\beta 7$ in direct ELISAs and Western blots. In Western blots, no cross-reactivity with recombinant human Integrin $\beta 1$, $\beta 2$, $\beta 3$, $\beta 4$, $\beta 5$, $\beta 6$, $\beta 8$, recombinant mouse Integrin $\beta 4$, or $\beta 7$ is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 473207
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human Integrin $\beta 7$ long isoform Glu20-His723 Accession # P26010
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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
Flow Cytometry	0.25-1 μ g/10 ⁶ cells	Human peripheral blood lymphocytes

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied.

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 $\beta 7$.

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