

DESCRIPTION

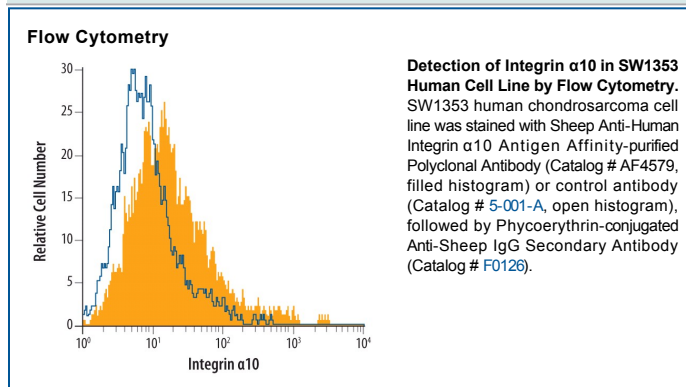
Species Reactivity	Human
Specificity	Detects human Integrin α 10 in direct ELISAs. In direct ELISAs, less than 1% cross-reactivity with recombinant human (rh) Integrin α 1, rhIntegrin α 2, and rhIntegrin α 11 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Integrin α 10 Thr685-Glu831 Accession # O75578
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

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	2.5 μ g/10 ⁶ cells	See Below

DATA



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.
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 α 10 (also ITGA10) is a 160 kDa member of the integrin alpha chain family of molecules. Mature human integrin α 10 is a 1145 amino acid (aa) type I transmembrane glycoprotein that contains a 1100 aa extracellular domain (ECD) (aa 23-1122) plus a 22 aa cytoplasmic tail. The ECD contains two FG-GAP regions (aa 24-95), followed by one vWFA domain (aa167-350) and five consecutive FG-GAP regions (aa 361-657). The FG-GAP repeats are suggested to participate in the formation of a β -propeller. Integrin α 10 is expressed by chondrocytes in hyaline cartilage, and mesenchymal stem cells with chondrogenic potential. It is also synthesized by fibroblasts in epimysium and tendon. Integrin α 10 forms a nondisulfide-linked heterodimer with integrin β 1, and this complex serves as a receptor for collagen type II. There are multiple potential isoform variants. One reportedly contains a Val-Ser substitution for aa 123-1167, a second shows a deletion of aa 19-161, and a third possesses a 30 aa substitution for aa 1-161. Over aa 685-831, human Integrin α 10 shares 86% aa sequence identity with mouse integrin α 10.