

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Integrin α V/CD51 in Western blots. In Western blots, approximately 10% cross-reactivity with recombinant mouse (rm) Integrin α V is observed, 5% cross-reactivity with recombinant human (rh) Integrin α 2 is observed, and less than 1% cross-reactivity with rhIntegrin α 5 and rmIntegrin α E is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human Integrin α V/CD51 Phe31-Val992 Accession # NP_002201
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

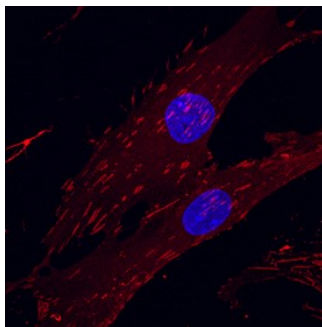
APPLICATIONS

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
Western Blot	0.1 μ g/mL	Recombinant Human Integrin α V/CD51
Flow Cytometry	2.5 μ g/10 ⁶ cells	Human peripheral blood mononuclear cells
Immunocytochemistry	5-15 μ g/mL	See Below

DATA

Immunocytochemistry



Integrin α V/CD51 in Human Mesenchymal Stem Cells. Integrin α V/CD51 was detected in immersion fixed human mesenchymal stem cells using Goat Anti-Human Integrin α V/CD51 Biotinylated Antigen Affinity-purified Polyclonal Antibody (Catalog # BAF1219) at 10 μ g/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Streptavidin (red; Catalog # NL999) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm and cell surface. View our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

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.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <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 V, also known as CD51 and vitronectin receptor subunit α , is a 140 - 150 kDa integrin alpha chain that forms dimers with at least five beta chains including β 1, 3, 5, 6, and 8. It is a 1018 amino acid (aa) residue type I membrane protein with a large (962 aa) extracellular domain (ECD) and a short (32 aa) cytoplasmic tail. The N-terminal region of α V, which is important for ligand binding, contains seven FG-GAP (phenylalanyl-glycyl and glycyl-alanyl-prolyl) consensus repeats that fold into a β -propeller domain. Furin cleavage of the α V ECD occurs after Gly 889, generating a disulfide-linked, heteromeric subunit α V chain. α V-containing integrins bind multiple ECM molecules, including vitronectin, osteopontin, MMP-2, and TSP. The ECD of human Integrin α V shares 92% aa sequence identity with mouse Integrin α V ECD.