

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Integrin α V in direct ELISAs and Western blots. In Western blots, less than 1% cross-reactivity with recombinant human Integrin α 5 and recombinant mouse Integrin 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 # P06756
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

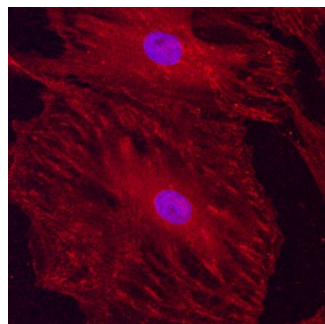
APPLICATIONS

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
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 Rat Mesenchymal Stem Cells. Integrin α V/CD51 was detected in immersion fixed undifferentiated rat mesenchymal stem cells using Goat Anti-Human Integrin α V/CD51 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1219) at 10 μ g/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

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	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 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.