

DESCRIPTION

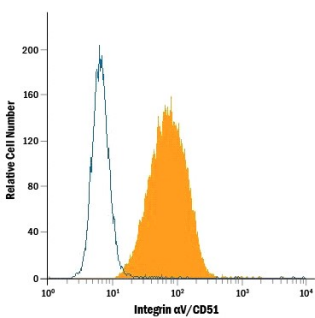
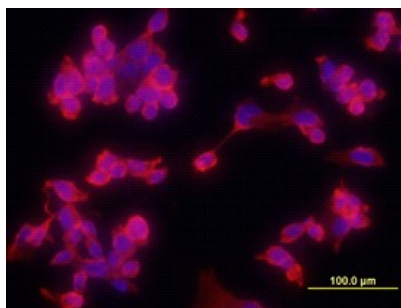
Species Reactivity	Human
Specificity	Detects the ectodomain of human Integrin α V/CD51.
Source	Monoclonal Mouse IgG ₁ Clone # P2W7
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Ocular melanoma cell line
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS 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
Flow Cytometry	0.25 μ g/10 ⁶ cells	See Below
Immunocytochemistry	8-25 μ g/mL	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA

<p>Flow Cytometry</p>  <p>Detection of Integrin αV/CD51 in HT1080 Human Cell Line by Flow Cytometry. HT1080 human fibrosarcoma cell line was stained with Mouse Anti-Human Integrin αV/CD51 Monoclonal Antibody (Catalog # MAB1219, filled histogram) or isotype control antibody (Catalog # MAB002, open histogram), followed by Fluorescein-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0103B).</p>	<p>Immunocytochemistry</p>  <p>Integrin αV/CD51 in HT1080 Human Cell Line. Integrin αV/CD51 was detected in immersion fixed HT1080 human fibrosarcoma cell line using 10 μg/mL Mouse Anti-Human Integrin αV/CD51 Monoclonal Antibody (Catalog # MAB1219) for 3 hours at room temperature. Cells were stained with the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). View our protocol for Fluorescent ICC Staining of Cells on Coverslips.</p>
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PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 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	<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 (CD51), also known as Vitronectin Receptor Subunit alpha is a 140-150 kDa member of the integrin α -chain family of adhesion molecules. It forms disulfide-linked integral membrane heterodimers with at least five β -chains, including β 1, 3, 5, 6 and 8. Human α V is a 1018 amino acid (aa) type I transmembrane glycoprotein that contains a 962 aa extracellular domain (ECD) (aa 31-992), and a short 32 aa cytoplasmic tail. The ECD contains seven FG (PheAlaGly)-GAP (GlyAlaPro) repeats that form a β -propeller domain (aa 46-483). Furin cleavage of the α V ECD occurs after Gly889, 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 α V is 92% aa identical to mouse α V ECD.