

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects the ectodomain of human Integrin $\alpha$ V/CD51.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # P2W7
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Ocular melanoma cell line
<b>Conjugate</b>	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 nm
<b>Formulation</b>	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
<b>Flow Cytometry</b>	0.25-1 $\mu$ g/10 <sup>6</sup> cells	HT1080 human fibrosarcoma cell line

## PREPARATION AND STORAGE

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

## BACKGROUND

Integrin  $\alpha$ V (CD51), also known as Vitronectin Receptor Subunit alpha is a 140-150 kDa member of the integrin  $\alpha$ -chain family of adhesion molecules. It forms disulfide-linked integral membrane heterodimers with at least five  $\beta$ -chains, including  $\beta$ 1, 3, 5, 6 and 8. Human  $\alpha$ 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  $\beta$ -propeller domain (aa 46-483). Furin cleavage of the  $\alpha$ V ECD occurs after Gly889, generating a disulfide-linked heteromeric subunit  $\alpha$ V chain.  $\alpha$ V-containing integrins bind multiple ECM molecules, including Vitronectin, Osteopontin, MMP-2 and TSP. The ECD of human  $\alpha$ V is 92% aa identical to mouse  $\alpha$ V ECD.

## PRODUCT SPECIFIC NOTICES

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