Human Integrin αV/CD51 Antibody
Monoclonal Mouse IgG1, Clone # 273210
Catalog Number: MAB12191

**DESCRIPTION**

Species Reactivity: Human
Specificity: Detects human Integrin αV/CD51 in direct ELISAs.
Source: Monoclonal Mouse IgG1, Clone # 273210
Purification: Protein A or G purified from hybridoma culture supernatant
Immunogen: Chinese hamster ovary cell line CHO-derived recombinant human Integrin αV/CD51 Phe31-Val992
Accession #: NP_002201
Formulation: Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

**APPLICATIONS**

<table>
<thead>
<tr>
<th>Recommended Concentration</th>
<th>Sample</th>
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</thead>
<tbody>
<tr>
<td>Flow Cytometry</td>
<td>2.5 µg/10^6 cells</td>
</tr>
<tr>
<td>Immunocytochemistry</td>
<td>8-25 µg/mL</td>
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</tbody>
</table>

CyTOF-ready: Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.

**DATA**

Immunocytochemistry

Integrin αV/CD51 in Rat Mesenchymal Stem Cells. Integrin αV/CD51 was detected in immersion fixed rat mesenchymal stem cells using Mouse Anti-Human Integrin αV/CD51 Monoclonal Antibody (Catalog # MAB12191) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) 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 0.5 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 supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

Stability & Storage: Use a manual defrost freezer and avoid repeated freeze-thaw cycles.
- 12 months from date of receipt, -20 to -70 °C as provided.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

**BACKGROUND**

Integrin αV (CD51; also 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 β1, 3, 5, 6, and 8. Human αV is a 1018 aa type I transmembrane glycoprotein that contains a 962 aa extracellular domain (ECD) 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 αV ECD occurs after Gly889, generating a disulfide-linked heteromeric subunit αV chain. αV-containing integrins bind multiple ECM molecules, including vitronectin, osteopontin, MMP-2 and TSP. The ECD of human αV shares 92% and 90% aa sequence identity with mouse and rat αV ECD, respectively.