### DESCRIPTION

<table>
<thead>
<tr>
<th>Species Reactivity</th>
<th>Human</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specificity</td>
<td>Detects human Integrin β2/CD18 in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant human Integrin β1 or recombinant mouse Integrin α5 is observed.</td>
</tr>
<tr>
<td>Source</td>
<td>Monoclonal Mouse IgG1, Clone # 212701</td>
</tr>
<tr>
<td>Purification</td>
<td>Protein A or G purified from hybridoma culture supernatant</td>
</tr>
<tr>
<td>Immunogen</td>
<td>Mouse myeloma cell line NS0-derived recombinant human Integrin β2/CD18 Gln23-Asn700 Accession # AAA59490</td>
</tr>
<tr>
<td>Conjugate</td>
<td>Allophycocyanin</td>
</tr>
<tr>
<td>Excitation Wavelength</td>
<td>620-650 nm</td>
</tr>
<tr>
<td>Emission Wavelength</td>
<td>660-670 nm</td>
</tr>
<tr>
<td>Formulation</td>
<td>Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.</td>
</tr>
</tbody>
</table>

*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.

<table>
<thead>
<tr>
<th>Application</th>
<th>Recommended Concentration</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Cytometry</td>
<td>10 µL/10^6 cells</td>
<td>See Below</td>
</tr>
</tbody>
</table>

### DATA

**Flow Cytometry**

Detection of Integrin β2/CD18 in Human Blood Lymphocytes by Flow Cytometry.

Human peripheral blood lymphocytes were stained with Mouse Anti-Human Integrin β2/CD18 APC-conjugated Monoclonal Antibody (Catalog # FAB1730A, filled histogram) or isotype control antibody (Catalog # IC002A, open histogram). View our protocol for Staining Membrane-associated Proteins.

### PREPARATION AND STORAGE

**Shipping**
The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage**
- Protect from light. Do not freeze.
- 12 months from date of receipt, 2 to 8 °C as supplied.
Integrin αXβ2, also called CD11c/CD18, p150/95 or Complement Receptor type 4 (CR4), is one of four β2 integrins. The non-covalent heterodimer of 150 kDa αX/CD11c and 95 kDa β2/CD18 integrin subunits is expressed on macrophages, dendritic cells and hairy cell leukemias, with lower amounts on other myeloid cells and activated B, NK and some cytotoxic T cells (1-7). Like other integrins, αXβ2 has multiple activation states (3). In the presence of divalent cations and “inside-out” signaling, αXβ2 is fully active and extended. The αX vWFA or I-domain, which contains the adhesion sites, forms the N-terminal head region with the αX beta-propeller and the β2 vWFA domain (1, 8). In the inactive state, the heterodimer flexes in the center at the αX thigh and calf domains and β2 I-EGF domains, impeding access to adhesion sites (1). The 1088 amino acid (aa) human αX/CD11c ECD shares 70-76% aa sequence identity with mouse, rat and canine αX while the 678 aa human β2/CD18 ECD shares 81-83% aa sequence identity with mouse, rat, cow, dog, goat, sheep, and pig β2. Potential αX isoforms containing 719 and 725 aa (as compared to full-length 1163 aa αX) lack the vWFA domain and the N-terminus. Active αXβ2 shares some adhesion partners with αMβ2/CD11b/CD18, including complement opsonin fragment iC3b, ICAMs, vWF and fibrinogen, and is expressed on many of the same cells (4-11). However, αMβ2 activity is often constitutive, while αXβ2 activity requires cell activation (4-7). αXβ2 also binds osteopontin, Thy-1, plasminogen, heparin, and proteins with abnormally exposed acidic residues (11-16). The adhesion events are important for proliferation, degranulation, chemotactic migration, and phagocytosis of complement-opsonized particles (5, 6, 9, 11, 12, 16). Mutations of β2, especially in the vWFA domain, cause Leukocyte Adhesion Deficiency (LAD-1) and susceptibility to bacterial infections (17).

References: