CD41a (HIP8)

Monoclonal Antibodies
Detecting Human Antigens

Research applications include studies of:
- Platelets, platelet-derived microparticles, and megakaryocytes
- Stem cell transplantation
- Glanzmann’s thrombasthenia
- Cell adhesion
- Megakaryoblastic leukemia
- Idiopathic thrombocytopenia

DESCRIPTION

Specificity
The CD41a antibody recognizes the calcium-dependent gpIIb/IIIa complex, with a molecular weight of 140 kilodaltons (kDa).

Antigen distribution
The CD41a antigen (gpIIb/IIIa complex) is found on platelets and platelet precursors. It acts as a receptor for fibrinogen, von Willebrand factor (vWF), fibronectin, and vitronectin, and it mediates platelet adhesion and aggregation.

Clone
The CD41a antibody, clone HIP8, is derived from hybridization of P3X63 mouse myeloma cells with spleen cells from BALB/c mice immunized with purified platelet membrane glycoproteins.

Composition
The CD41a antibody is composed of mouse IgG1 heavy chains and kappa light chains.

Product configuration
The following are supplied in phosphate buffered saline (PBS) containing a stabilizer and a preservative.

<table>
<thead>
<tr>
<th>Form</th>
<th>Number of tests</th>
<th>Volume per test (µL)a</th>
<th>Amount provided (µg)</th>
<th>Total volume (mL)</th>
<th>Concentration (µg/mL)</th>
<th>Stabilizer</th>
<th>Preservative</th>
</tr>
</thead>
<tbody>
<tr>
<td>FITC</td>
<td>50</td>
<td>20</td>
<td>25</td>
<td>1.0</td>
<td>25</td>
<td>Gelatin</td>
<td>0.1% Sodium azide</td>
</tr>
<tr>
<td>PerCP-Cy5.5</td>
<td>50</td>
<td>20</td>
<td>25</td>
<td>1.0</td>
<td>25</td>
<td>Gelatin</td>
<td>0.1% Sodium azide</td>
</tr>
</tbody>
</table>

a. Volume required to stain 10⁶ cells.

PROCEDURE

Visit our website (bdbiosciences.com) or contact your local BD representative for the lyse/wash protocol for direct immunofluorescence.

Instructions on preparation and staining of fixed platelet suspensions are found in the BD procedure, Platelet Activation, Staining, and Analysis.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.
**REPRESENTATIVE DATA**

Performed on fixed platelets with scatter gates set on the platelet fraction. Laser excitation is at 488 nm.

**Figure 1** Representative data analyzed with a BD FACS™ brand flow cytometer

**HANDLING AND STORAGE**

Store vials at 2°C–8°C. Conjugated forms should not be frozen. Protect from exposure to light. Each reagent is stable until the expiration date shown on the bottle label when stored as directed.

**WARNING**

All biological specimens and materials coming in contact with them are considered biohazards. Handle as if capable of transmitting infection\(^{11,12}\) and dispose of with proper precautions in accordance with federal, state, and local regulations. Never pipette by mouth. Wear suitable protective clothing, eyewear, and gloves.

**CHARACTERIZATION**

To ensure consistently high-quality reagents, each lot of antibody is tested for conformance with characteristics of a standard reagent. Representative flow cytometric data is included in this data sheet.

**WARRANTY**

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**REFERENCES**


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