Alexa Fluor® 647 Mouse Anti-Pig CD29

Product Information
Material Number: 561496
Alternate Name: Integrin β1 chain
Size: 50 µg
Concentration: 0.2 mg/ml
Clone: NaM160-1A3
Immunogen: Pig platelets
Isotype: Mouse (BALB/c) IgG1, κ
Reactivity: QC Testing: Pig
Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

Description
The NaM160-1A3 monoclonal antibody specifically binds to the 116-kDa integrin β1 chain (CD29). CD29 is expressed on the cell surface as a heterodimer with one of the distinct integrin α chains. With α1 through α6 (CD49a through CD49f), it forms the VLA-1 through VLA-6 complexes, respectively, and with αv (CD51), it forms αvβ1 integrin. As a result, CD29 has a broad tissue distribution, including leukocytes, endothelia, epithelia, and oocytes. Porcine CD29 is believed to be a major target for natural antibodies involved in rejection of pig-to-human xenografts, and a mAb to block recognition of pig CD29 may have therapeutic applications. NaM160-1A3 mAb does not crossreact with human peripheral blood lymphocytes or umbilical cord vein endothelial cells.

Preparation and Storage
The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. The antibody was conjugated to Alexa Fluor® 647 under optimum conditions, and unreacted Alexa Fluor® 647 was removed. Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

Application Notes
Application
Flow cytometry Routinely Tested

Suggested Companion Products
<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
</tr>
</thead>
<tbody>
<tr>
<td>557714</td>
<td>Alexa Fluor® 647 Mouse IgG1 κ Isotype Control</td>
<td>100 tests</td>
<td>MOPC-21</td>
</tr>
<tr>
<td>555899</td>
<td>Lysing Buffer</td>
<td>100 ml</td>
<td>(none)</td>
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<tr>
<td>554656</td>
<td>Stain Buffer (FBS)</td>
<td>500 ml</td>
<td>(none)</td>
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Flow cytometric analysis of CD29 expression on pig peripheral blood leukocytes. Pig whole blood was stained with either Alexa Fluor® 647 Mouse Anti-Pig CD29 antibody (Cat. No. 561496, solid line histogram) or with an Alexa Fluor® 647 mouse IgG1, κ Isotype Control (Cat. No. 557714; dashed line histogram). The erythrocytes were lysed with BD PharmLyse™ Lysing Buffer (Cat. No. 555899). The fluorescence histograms were derived from gated events with the forward and side light-scatter characteristics of viable lymphocytes (Left Panel), monocytes (Middle Panel) or granulocytes (Right Panel). Flow cytometry was performed using a BD™ LSR II Flow Cytometer System.
**Product Notices**

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. An isotype control should be used at the same concentration as the antibody of interest.
4. The Alexa Fluor®, Pacific Blue™, and Cascade Blue® dye antibody conjugates in this product are sold under license from Molecular Probes, Inc. for research use only, excluding use in combination with microarrays, or as analyte specific reagents. The Alexa Fluor® dyes (except for Alexa Fluor® 430), Pacific Blue™ dye, and Cascade Blue® dye are covered by pending and issued patents.
5. Alexa Fluor® is a registered trademark of Molecular Probes, Inc., Eugene, OR.
6. Alexa Fluor® 647 fluorochrome emission is collected at the same instrument settings as for allophycocyanin (APC).
7. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
8. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.

**References**


