BD Pharmingen™

Technical Data Sheet

PE Mouse Anti-SHIP-1

Product Information

Material Number: 566009
Alternate Name: Ship1; Ship; Inpp5d; p150Ship; SIP-145; s-SHIP; 7a33
Size: 50 µg
Concentration: 0.2 mg/ml
Clone: 32/SHIP-1
Immunogen: Mouse p150 [SHIP] aa. 16-135
Isotype: Mouse IgG1, κ
Reactivity: QC Testing: Mouse
Tested in Development: Rat
Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The 32/SHIP-1 monoclonal antibody specifically recognizes the cytosolic lipid phosphatase, SH2 domain-containing inositol phosphatase 1 (SHIP-1), which is also known as Inpp5d. SHIP-1 is expressed in cells of the hematopoietic lineage. Cells can phosphorylate and activate SHIP-1 in response to a variety of cytokines or triggering through B or T cell antigen receptors. Activated SHIP-1 hydrolyzes phosphatidylinositol-3,4,5-triphosphate to phosphatidylinositol-3,4-bisphosphate. This ultimately blocks the recruitment of PH-domain containing effector proteins, such as Btk and Akt, and can prevent cellular activation.

Flow cytometric analysis of SHIP-1 expressed on mouse splenocytes and bone marrow cells. C57BL/6 mouse splenic leucocytes (Left Plot) and bone marrow cells (Right Plot) were treated with BD Pharm Lyse™ Cell Lysis Buffer (Cat. No. 555899) to lyse erythrocytes, washed, fixed with BD Cytofix™ Fixation Buffer (Cat. No. 554655), and permeabilized with BD Phosflow™ Perm Buffer III (Cat. No. 556050). The permeabilized cells were stained with either PE Mouse IgG 1, κ Isotype Control (Cat. No. 554680; dashed line histograms) or PE Mouse Anti-SHIP-1 antibody (solid line histograms). The fluorescence histograms showing SHIP-1 (or Ig Isotype control staining) were derived from gated events with the forward and side light-scatter characteristics of viable splenocytes or bone marrow cells. Flow cytometric analysis was performed using a BD LSRFortessa™ X-20 Flow Cytometry System.

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.
The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
The antibody was conjugated with R-PE under optimum conditions, and unconjugated antibody and free PE were removed.

Application Notes

Application

Intracellular staining (flow cytometry)  Routinely Tested

BD Biosciences

BD Pharmingen™

Technical Data Sheet

PE Mouse Anti-SHIP-1

Product Information

Material Number: 566009
Alternate Name: Ship1; Ship; Inpp5d; p150Ship; SIP-145; s-SHIP; 7a33
Size: 50 µg
Concentration: 0.2 mg/ml
Clone: 32/SHIP-1
Immunogen: Mouse p150 [SHIP] aa. 16-135
Isotype: Mouse IgG1, κ
Reactivity: QC Testing: Mouse
Tested in Development: Rat
Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The 32/SHIP-1 monoclonal antibody specifically recognizes the cytosolic lipid phosphatase, SH2 domain-containing inositol phosphatase 1 (SHIP-1), which is also known as Inpp5d. SHIP-1 is expressed in cells of the hematopoietic lineage. Cells can phosphorylate and activate SHIP-1 in response to a variety of cytokines or triggering through B or T cell antigen receptors. Activated SHIP-1 hydrolyzes phosphatidylinositol-3,4,5-triphosphate to phosphatidylinositol-3,4-bisphosphate. This ultimately blocks the recruitment of PH-domain containing effector proteins, such as Btk and Akt, and can prevent cellular activation.

Flow cytometric analysis of SHIP-1 expressed on mouse splenocytes and bone marrow cells. C57BL/6 mouse splenic leucocytes (Left Plot) and bone marrow cells (Right Plot) were treated with BD Pharm Lyse™ Cell Lysis Buffer (Cat. No. 555899) to lyse erythrocytes, washed, fixed with BD Cytofix™ Fixation Buffer (Cat. No. 554655), and permeabilized with BD Phosflow™ Perm Buffer III (Cat. No. 556050). The permeabilized cells were stained with either PE Mouse IgG 1, κ Isotype Control (Cat. No. 554680; dashed line histograms) or PE Mouse Anti-SHIP-1 antibody (solid line histograms). The fluorescence histograms showing SHIP-1 (or Ig Isotype control staining) were derived from gated events with the forward and side light-scatter characteristics of viable splenocytes or bone marrow cells. Flow cytometric analysis was performed using a BD LSRFortessa™ X-20 Flow Cytometry System.

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.
The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
The antibody was conjugated with R-PE under optimum conditions, and unconjugated antibody and free PE were removed.

Application Notes

Application

Intracellular staining (flow cytometry)  Routinely Tested

BD Biosciences

bdbiosciences.com

United States  Canada  Europe  Japan  Asia Pacific  Latin America/Caribbean
877.232.8995  866.979.9408  32.2.400.98.95  0120.8555.90  65.6861.0633  55.11.5185.9995

For country contact Information, visit bdbiosciences.com/contact

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton, Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

Unless otherwise noted, BD, BD Logo and all other trademarks are property of Becton, Dickinson and Company. © 2015 BD

566009 Rev. 1
Suggested Companion Products

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
</tr>
</thead>
<tbody>
<tr>
<td>555899</td>
<td>Lysing Buffer</td>
<td>100 mL</td>
<td>(none)</td>
</tr>
<tr>
<td>554656</td>
<td>Stain Buffer (FBS)</td>
<td>500 mL</td>
<td>(none)</td>
</tr>
<tr>
<td>554657</td>
<td>Stain Buffer (BSA)</td>
<td>500 mL</td>
<td>(none)</td>
</tr>
<tr>
<td>554680</td>
<td>PE Mouse IgG1, κ Isotype Control</td>
<td>0.1 mg</td>
<td>MOPC-21</td>
</tr>
<tr>
<td>554655</td>
<td>Fixation Buffer</td>
<td>100 mL</td>
<td>(none)</td>
</tr>
<tr>
<td>558050</td>
<td>Perm Buffer III</td>
<td>125 mL</td>
<td>(none)</td>
</tr>
</tbody>
</table>

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
3. 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.
4. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
5. Species testing during development may have been performed with a different format of the same clone. Selected applications have been tested for cross-reactivity.
6. An isotype control should be used at the same concentration as the antibody of interest.

References

Muraille E, Pesesse X, Kunz C, Erneux C. Distribution of the src-homology-2-domain-containing inositol 5-phosphatase SHIP-2 in both non-haemopoietic and haemopoietic cells and possible involvement of SHIP-2 in negative signalling of B-cells. Biochem J. 1999; 342(PT3):697-705. (Biology)