**Description**

Species Reactivity: Human

Specificity: Detects liver, bone and kidney Alkaline Phosphatase/ALPL from human tissue (2).

Source: Monoclonal Mouse IgG1 Clone # B4-78

Purification: Protein A or G purified from hybridoma culture supernatant

Immunogen: Human liver, bone and kidney-derived Alkaline Phosphatase/ALPL

Formulation: Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

*Small pack size (SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

**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>Recommended Concentration</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Cytometry</td>
<td>2.5 µg/10⁶ cells</td>
</tr>
<tr>
<td>Immunocytochemistry</td>
<td>8-25 µg/mL</td>
</tr>
<tr>
<td>Immunohistochemistry</td>
<td>8-25 µg/mL</td>
</tr>
</tbody>
</table>

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

**Data**

**Flow Cytometry**

Detection of Alkaline Phosphatase/ALPL in BG01V Human Cells by Flow Cytometry. BG01V human embryonic stem cells were stained with Mouse Anti-Human Alkaline Phosphatase/ALPL Monoclonal Antibody (Catalog # MAB1448, filled histogram) or isotype control antibody (Catalog # MAB002, open histogram), followed by Phycoerythrin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0102B).

**Immunocytochemistry**

Alkaline Phosphatase and Oct-3/4 in BG01V Human Stem Cells. Alkaline Phosphatase/ALPL and Oct-3/4 were detected in human BG01V embryonic stem cells using 10 µg/mL Mouse Anti-Human Alkaline Phosphatase/ALPL Monoclonal Antibody (Catalog # MAB1448) and 10 µg/mL Human Oct-3/4 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1759). Cells were incubated with primary antibodies for 3 hours at room temperature. Cells were stained for Alkaline Phosphatase/ALPL using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (pseudostained green; Catalog # NL007), and stained for Oct-3/4 using the NorthernLights™ 637-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL002). View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

**Immunohistochemistry**

Alkaline Phosphatase/ALPL in Human Kidney. Alkaline Phosphatase/ALPL was detected in immersion fixed paraffin-embedded sections of human kidney using Mouse Anti-Human Alkaline Phosphatase/ALPL Monoclonal Antibody (Catalog # MAB1448) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm in epithelial cells. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.

**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.

Stability & Storage: Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

*Small pack size (SP) is shipped with polar packs. Upon receipt, store it immediately at 20 to 70 °C.

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The liver, bone and kidney Alkaline Phosphatase, also known as tissue non-specific Alkaline Phosphatase, is a glycosyl phosphatidylinositol (GPI) anchored protein. Human liver/bone/kidney Alkaline Phosphatase shares 90% amino acid sequence homology with the mouse enzyme.

References: