Mouse Anti-Human CD107b

Overview

Clone: H4B4
Isotype: Mouse (BALB/c) IgG\(\kappa\)
Immunogen: Human adherent peripheral blood cells
Specificity: Human/Rhesus/African Green Monkey CD107b; Mr 100-120 kDa
Alternate Name(s): LAMP-2, lysosome-associated membrane protein 2
Workshop: V P007; VI PR-64

Description

CD107b, also known as lysosomal-associated membrane protein 2 (LAMP-2), is a heavily glycosylated type I transmembrane protein that constitutes the major sialoglycoproteins on lysosomal membranes. It is a ligand for galaptin, an S-type lectin present in extracellular matrix, through its recognition of acetylaactosamine oligosaccharide chains and is a ligand for E-selectin-mediated cell adhesion. CD107b is expressed in lysosomal/endosomal membranes and on the surface of activated platelets and some tumor cell lines including U937 and KG1a. LAMP-2 may function in protecting the inner surface of the lysosomal membrane by forming a barrier to lysosomal hydrolases. The upregulation of both CD107a and CD107b on the surface of tumor cell lines has been associated with their enhanced metastatic potential where they may increase adhesion to extracellular matrix and endothelium.

Applications

- FC – Quality tested \(^1,15,16\)
- IHC-FS – Reported in literature \(^2,3\)
- IHC-PS – Reported in literature \(^4,5\)
- ICC – Reported in literature \(^6-9,11,17-19\)
- EM – Reported in literature \(^1\)
- IP – Reported in literature \(^1\)
- WB – Reported in literature \(^9-14\)
- Purification – Reported in literature \(^1\)

Working Dilutions

**Flow Cytometry**

- Purified (UNLB) antibody \(\leq 1 \mu g/1 \times 10^6 \) cells
- FITC, BIOT, PE, SPRD, PACBLU, AF488, AF647, and AF700 conjugates \(10 \mu L/1 \times 10^6 \) cells

For flow cytometry, the suggested use of these reagents is in a final volume of 100 \(\mu L\).

Other Applications

Since applications vary, you should determine the optimum working dilution for the product that is appropriate for your specific need.

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Corporate Offices: 160 Oxmoor Blvd • Birmingham, AL 35209 • USA  Mailing Address: P.O. Box 26221 • Birmingham, AL 35260 • USA  Tel: 205.945.1774 • U.S. and Canada: 800.722.2255 • Fax: 205.945.8768  Email: info@southernbiotech.com • Website: www.southernbiotech.com
Handling and Storage

- The purified (UNLB) antibody is supplied as 0.1 mg of purified immunoglobulin in 1.0 mL of borate buffered saline, pH 8.2. *No preservatives or amine-containing buffer salts added.* Store at 2-8°C.
- The fluorescein (FITC) conjugate is supplied as 25 tests in 0.25 mL or 100 tests in 1.0 mL of PBS/NaNO₃. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 100 tests in 1.0 mL of PBS/NaNO₃. Store at 2-8°C.
- The R-phycocerythrin (PE) conjugate is supplied as 25 tests in 0.25 mL or 100 tests in 1.0 mL of PBS/NaNO₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The Spectral Red® (SPRD) conjugate is supplied as 100 tests in 1.0 mL of PBS/NaNO₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The Alexa Fluor® 488 (AF488), Alexa Fluor® 647 (AF647), Alexa Fluor® 700 (AF700), and Pacific Blue™ (PACBLU) conjugates are supplied as 100 tests in 1.0 mL of PBS/NaNO₃. Store at 2-8°C.**Do not freeze!**
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Warning

Some reagents contain sodium azide. Please refer to product specific (M)SDS.

References

17. Tabuchi M, Yoshimoto T, Yamaguchi K, Yoshida T, Kishi F. African Green Monkey Reactivity

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Spectral Red® is a PE/CY5 tandem conjugate.
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