Technical Data Sheet

PE Mouse Anti-Human CD11a

Product Information

Material Number: 550851
Alternate Name: LFA-1α; Lymphocyte (Leukocyte) function-associated antigen 1 α chain; ITGAL
Size: 50 Tests
Vol. per Test: 20 µl
Clone: HI111
Isotype: Mouse IgG1, κ
Reactivity: QC Testing: Rhesus, Cynomolgus, Baboon
Tested in Development: Human, Dog, Rabbit
Workshop: IV N231
Storage Buffer: Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The HI111 monoclonal antibody specifically binds to CD11a, the 180 kDa integrin α chain. This type I transmembrane glycoprotein associates with CD18 (integrin β2) to form the heterodimeric glycoprotein CD11a/CD18. This heterodimer is also known as the lymphocyte (leukocytes) function associated antigen-1 (LFA-1) that is expressed on all leukocytes. LFA-1 is an adhesion molecule involved in lymphocyte and granulocyte functions. LFA-1 mediates adhesion of lymphoid cells to the vascular endothelium in association with its ligand, and the intracellular adhesion molecule-1 (ICAM-1), CD54. Other ligands are ICAM-2 (CD102) and ICAM-3 (CD50).

Clone HI111 also cross reacts with all leukocytes of baboon, and both rhesus and cynomolgus macaque monkeys. The distribution of leukocytes is similar to that observed with peripheral blood leukocytes from normal human donors, with the lymphocyte population also showing a bimodal staining pattern.

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

Flow cytometry Routinely Tested
### Suggested Companion Products

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<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
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<td>MOPC-21</td>
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<td>100 Tests</td>
<td>HI111</td>
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<td>Stain Buffer (BSA)</td>
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<td>Lysing Buffer</td>
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### Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 × 10^6 cells in a 100-µl experimental sample (a test).
2. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
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 wwwbdbiosciences.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. Please refer to wwwbdbiosciences.com/pharmingen/protocols for technical protocols.

### References

- Dustin ML, Springer TA. Lymphocyte function-associated antigen-1 (LFA-1) interaction with intercellular adhesion molecule-1 (ICAM-1) is one of at least three mechanisms for lymphocyte adhesion to cultured endothelial cells. J Cell Biol. 1988; 107(1):321-331. (Biology)