APC-H7 Mouse Anti-Human CD4

Product Information

560837

L3T4 ; T-cell surface antigen T4/Leu-3; W3/25 ; CD4 antigen (p55)

50 Tests

5 µl

L200

Human HPB-ALL Cell Line

Mouse (BALB/c) IgG1, κ

Rhesus, Cynomolgus, Baboon

Aqueous buffered solution containing BSA, protein stabilizer, and ≤0.09% sodium azide.

Description

The L200 monoclonal antibody specifically binds to the human form of the 56 kDa transmembrane glycoprotein, CD4, which is present on the T-helper/inducer subset of normal human donor peripheral blood lymphocytes. The L200 antibody also cross-reacts with a subset of CD3-positive peripheral blood lymphocytes, but not monocytes, of both Rhesus and Cynomolgus Macaque monkeys. Cross-reactivity on both lymphocytes and monocytes (weak) from baboons is also observed. CD4 distribution on lymphocytes is similar for both human and monkey cells, with the majority of CD4-positive lymphocytes being CD8-negative and lacking reactivity with antibodies to B- or NK-cell markers.

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.

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>
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<tr>
<td>560167</td>
<td>APC-H7 Mouse IgG1, κ Isotype Control</td>
<td>0.1 mg</td>
<td>MOPC-21</td>
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<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>
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<tr>
<td>554657</td>
<td>Stain Buffer (BSA)</td>
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<td>349202</td>
<td>BD FACSTM Lysing Solution</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. An isotype control should be used at the same concentration as the antibody of interest.
3. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
4. 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.
5. Please observe the following precautions: Absorption of visible light can significantly alter the energy transfer occurring in any tandem fluorochrome conjugate; therefore, we recommend that special precautions be taken (such as wrapping vials, tubes, or racks in aluminum foil) to prevent exposure of conjugated reagents, including cells stained with those reagents, to room illumination.
6. BD APC-H7 is a tandem conjugate and an analog of APC-Cy7 with the same spectral properties. It has decreased intensity but it is engineered for greater stability and less spillover in the APC channel and consequently offers better performance than APC-Cy7. It has an absorption maximum of approximately 650 nm. When excited by light from a red laser, the APC fluorochrome can transfer energy to the cyanine dye, which then emits at a longer wavelength. The resulting fluorescent emission maximum is approximately 767 nm. BD recommends that a 750-nm longpass filter be used along with a red-sensitive detector such as the Hamamatsu R3896 PMT. As with APC-Cy7 specific filters are required when using APC-H7 in conjunction with APC.

Note: Although our APC-H7 products demonstrate higher lot-to-lot consistency than other APC tandem conjugate products, and every effort is made to minimize the lot-to-lot variation in residual emission from APC, it is strongly recommended that every lot be tested for differences in the amount of compensation required and that individual compensation controls are run for each APC-H7 conjugate.

7. Although BD APC-H7 is engineered to minimize spillover to the APC channel and is more stable and less affected by light, temperature, and formaldehyde-based fixatives, compared to other APC-cyanine tandem dyes, it is still good practice to minimize as much as possible, any light, temperature and fixative exposure when working with all fluorescent conjugates.
8. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
9. Cy is a trademark of GE Healthcare.
10. Species testing during development may have been performed with a different format of the same clone. Selected applications have been tested for cross-reactivity.

Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References


Schlossman SF, Stuart F, Schlossman ... et al., ed. Leucocyte typing V : white cell differentiation antigens ; proceedings of the fifth international workshop and conference held in Boston, USA, 3-7 November, 1993. Oxford: Oxford University Press; 1995(Biology)


Verdier F, Aujuflet M, Condevaux F, Descotes J. Determination of lymphocyte subsets and cytokine levels in cynomolgus monkeys. Toxicology. 1996; 155(1):81-90. (Biology)