Technical Data Sheet

APC Mouse Anti-Human MIP-1\(\begin{aligned} \text{APC Mouse Anti-Human MIP-1} \end{aligned} \]

Product Information

560686 **Material Number:** 50 tests Size: 5 µl Vol. per Test: D21-1351 Clone:

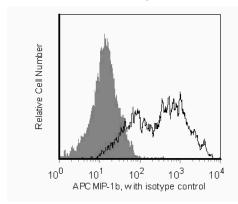
Recombinant Human MIP-1β Immunogen:

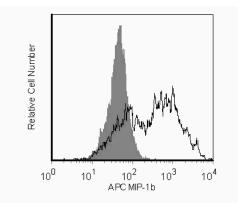
Mouse IgG1, κ Isotype: QC Testing: Human Reactivity:

Storage Buffer: Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The D21-1351 monoclonal antibody specifically binds to the human CC chemokine, MIP-1β (macrophage inflammatory protein-1β). Human MIP-1β shares approximately 75% homology with mouse MIP-1β at the amino acid level. Expression of MIP-1β in human peripheral blood cells is induced by proinflammatory and mitogenic stimuli. MIP-1β is a chemoattractant for monocytes and lymphocytes. Human MIP-1β binds to receptors, CCR5 and CCR8. The human MIP-1β gene has been mapped to chromosome 17q11. The immunogen used to generate D21-1351 hybridoma was recombinant human MIP-1β.





Flow cytometric analysis of MIP-1β on human PBMC. Human PBMC were stimulated with 20 ng/mL human IFN-γ (Cat. No. 554616) for one hour followed by overnight incubation with 1 μg/mL LPS (Sigma-Aldrich, Cat. No. L-8272) in the presence of 2 µM BD GolgiStop™ (Cat. No. 554724). Left Panel: The PBMC were harvested, fixed, permeabilized, and stained with either a APC Mouse IgG1, K isotype control (shaded) or with the APC Mouse Anti-Human MIP-18 antibody (unshaded). Right Panel: Both unstimulated (shaded) and stimulated PBMC (unshaded) were harvested, fixed, permeabilized, and stained with the APC Mouse Anti-Human MIP-1β antibody. Histograms were derived from gated events based on light scattering characteristics for monocytes. Flow cytometry was performed on a BD™ LSR II 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 to APC under optimum conditions, and unconjugated antibody and free APC were removed.

Application Notes

Application

Intracellular staining (flow cytometry) Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	<u>Clone</u>
555751	APC Mouse IgG1, κ Isotype Control	100 tests	MOPC-21
554715	BD Cytofix/Cytoperm Plus Kit (with BD GolgiStop)	250 tests	(none)
554724	Protein Transport Inhibitor (Containing Monensin)	0.7 ml	(none)

BD Biosciences

bdbiosciences.com

United States 877.232.8995 888.268.5430 32.53.720.550 0120.8555.90 65.6861.0633 0800.771.7157

For country-specific contact information, visit bdbiosciences.com/how_to_order/

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.
BD, BD Logo and all other trademarks are the property of Becton, Dickinson and Company. ©2011 BD



Product Notices

- 1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 × 10⁶ 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. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
- 6. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

Bernardini G, Hedrick J, Sozzani S. Identification of the CC chemokines TARC and macrophage inflammatory protein-1 beta as novel functional ligands for the CCR8 receptor. *J Immunol.* 1998; 28(2):582-588. (Biology)

Combadiere C, Ahuja SK, Tiffany HL, Murphy PM. Cloning and functional expression of CC CKR5, a human monocyte CC chemokine receptor selective for MIP-1(alpha), MIP-1(beta), and RANTES. *J Leukoc Biol.* 1996; 60(1):147-152. (Biology)

Lipes MA, Napolitano M, Jeang KT, Chang NT, Leonard WJ. Identification, cloning, and characterization of an immune activation gene. *Proc Natl Acad Sci U S A.* 1988; 85(24):9704-9708. (Biology)

Napolitano M, Seamon KB, Leonard WJ. Identification of cell surface receptors for the Act-2 cytokine. *J Exp Med.* 1990; 172(1):285-289. (Biology) Prussin C, Metcalfe DD. Detection of intracytoplasmic cytokine using flow cytometry and directly conjugated anti-cytokine antibodies. *J Immunol Methods.* 1995; 188(1):117-128. (Methodology: Flow cytometry, IC/FCM Block)

Raport CJ, Gosling J, Schweickart VL, Gray PW, Charo IF. Molecular cloning and functional characterization of a novel human CC chemokine receptor (CCR5) for RANTES, MIP-1beta, and MIP-1alpha. *J Biol Chem.* 1996; 271(29):17161-17166. (Biology)

Samson M, Labbe O, Mollereau C, Vassart G, Parmentier M. Molecular cloning and functional expression of a new human CC-chemokine receptor gene. Biochemistry. 1996; 35(11):3362-3367. (Biology)

Sherry B, Tekamp-Olson P, Gallegos C. one of those components, macrophage inflammatory protein 1 beta. *J Exp Med.* 1988; 168(6):2251-2259. (Biology) Ziegler SF, Tough TW, Franklin TL, Armitage RJ, Alderson MR. Induction of macrophage inflammatory protein-1 beta gene expression in human monocytes by lipopolysaccharide and IL-7. *J Immunol.* 1991; 147(7):2234-2239. (Biology)

560686 Rev. 1 Page 2 of 2