

Technical Data Sheet

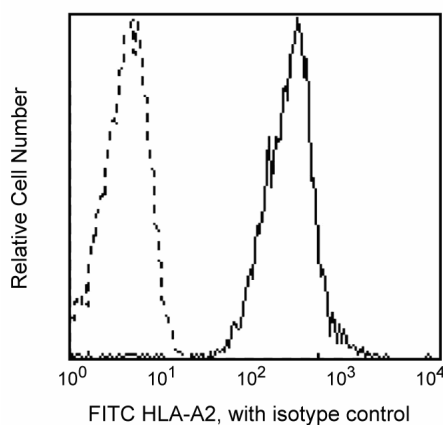
FITC Mouse Anti-Human HLA-A2

Product Information

Material Number:	561107
Size:	25 µg
Concentration:	0.5 mg/ml
Clone:	BB7.2
Isotype:	Mouse IgG2b, κ
Reactivity:	QC Testing: Human
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The monoclonal antibody BB7.2 specifically binds to the α subunit of the human leukocyte antigen-A2 (HLA-A2), a class I molecule of the major histocompatibility complex (MHC). The MHC gene locus encodes a group of highly polymorphic, cell-surface proteins that play a broad role in the immune response to protein antigens. MHC molecules function by binding and presenting small antigenic protein fragments to antigen-specific receptors expressed by T cells (TCR). Human (*human leukocyte antigen/HLA*) MHC molecules comprise two major classes, MHC class I and class II. Functionally, class I MHC molecules can bind peptides derived from intracellular antigens (eg, viral and some bacterial antigens) that are specifically recognized by CD8+ T cells, and class II MHC molecules recognize antigens derived from pathogens multiplying in intracellular vesicles, and those derived from ingested extracellular bacteria. When presented on the cell surface by the MHC class II molecules, these antigens are recognized by CD4+ T cells. TCR recognize both processed peptides bound to MHC, as well as regions of the MHC molecule itself. CD4 and CD8 accessory molecules strengthen formation of the TCR-MHC complex through their interaction with non-polymorphic regions of the MHC molecule.



Profile of peripheral blood lymphocytes analyzed by flow cytometry.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with FITC under optimum conditions, and unreacted FITC was removed.

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application

Flow cytometry	Routinely Tested
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Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

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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.

References

- Bjorkman PJ, Saper MA, Samraoui B, Bennett WS, Strominger JL, Wiley DC. Structure of the human class I histocompatibility antigen, HLA-A2. *Nature*. 1987; 329(6139):506-512. (Biology)
- Bjorkman PJ, Saper MA, Samraoui B, Bennett WS, Strominger JL, Wiley DC. The foreign antigen binding site and T cell recognition regions of class I histocompatibility antigens. *Nature*. 1987; 329(6139):512-518. (Biology)
- Romero P, Dunbar PR, Valmori D. Ex vivo staining of metastatic lymph nodes by class I major histocompatibility complex tetramers reveals high numbers of antigen-experienced tumor-specific cytolytic T lymphocytes. *J Exp Med*. 1998; 188(9):1641-1650. (Biology)