

Technical Data Sheet

PE-CF594 Mouse Anti-Mouse I-A[b]

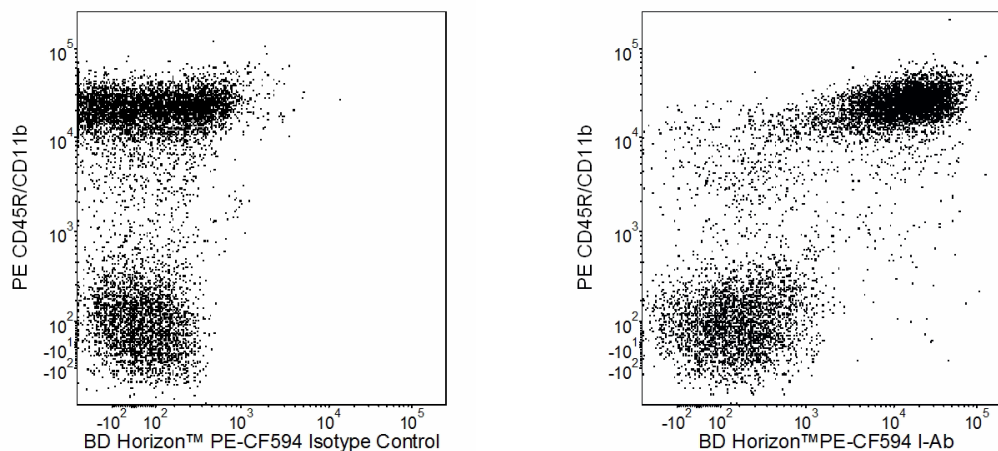
Product Information

Material Number:	562824
Alternate Name:	Mouse MHC/H2 class II histocompatibility antigen, I-Ab
Size:	50 µg
Concentration:	0.2 mg/ml
Clone:	AF6-120.1
Immunogen:	Mouse C57BL/10J
Isotype:	Mouse (BALB/c) IgG2a, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The AF6-120.1 antibody reacts with the I-A[b] MHC class II alloantigen. It cross-reacts with cells from mice of the H-2[k] and H-2[u] haplotypes. Reactivity with other haplotypes (e.g., *d*, *f*, *g7*, *p*, *q*, *r*, *s*) has not been observed.

This antibody is conjugated to BD Horizon™ PE-CF594, which has been developed exclusively by BD Biosciences as a better alternative to PE-Texas Red®. PE-CF594 excites and emits at similar wavelengths to PE-Texas Red® yet exhibits improved brightness and spectral characteristics. Due to PE having maximal absorption peaks at 496 nm and 564 nm, PE-CF594 can be excited by the blue (488-nm), green (532-nm) and yellow-green (561-nm) lasers and can be detected with the same filter set as PE-Texas Red® (eg 610/20-nm filter).



Multicolor flow cytometric analysis of I-A[b] expression on C57BL/6 mouse splenocytes. Splenic leucocytes were stained simultaneously with PE Rat anti-Mouse CD45R (Cat. No. 553090/553089/561878) and PE Rat anti-Mouse CD11b (Cat. No. 553311/557397/561689) antibodies and with either BD Horizon™ PE-CF594 Mouse IgG2a, κ Isotype Control (Cat. No. 562306; Left Panel) or BD Horizon™ PE-CF594 Mouse anti-Mouse I-A[b] antibody (Cat. No. 562824; Right Panel). Two-color flow cytometric dot plots show the correlated expression patterns of I-A[b] (or Ig Isotype control staining) versus CD45R and CD11b for gated events with the forward and side light-scatter characteristics of viable splenic leucocytes. Flow cytometry was performed using a BD™ LSR II Flow Cytometer 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 with BD Horizon™ PE-CF594 under optimum conditions, and unconjugated antibody and free PE-CF594 were removed.

Application Notes

Application

Flow cytometry	Routinely Tested
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Suggested Companion Products

Catalog Number	Name	Size	Clone
562306	PE-CF594 Mouse IgG2a, κ Isotype Control	0.1 mg	G155-178
554656	Stain Buffer (FBS)	500 ml	(none)
555899	Lysing Buffer	100 ml	(none)
553090	PE Rat Anti-Mouse CD45R/B220	0.2 mg	RA3-6B2
553089	PE Rat Anti-Mouse CD45R/B220	0.1 mg	RA3-6B2
561878	PE Rat Anti-Mouse CD45R/B220	25 μ g	RA3-6B2
553311	PE Rat Anti-Mouse CD11b	0.2 mg	M1/70
557397	PE Rat Anti-Mouse CD11b	0.1 mg	M1/70
561689	PE Rat Anti-Mouse CD11b	25 μ g	M1/70

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
3. An isotype control should be used at the same concentration as the antibody of interest.
4. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
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. 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.
7. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
8. Texas Red is a registered trademark of Molecular Probes, Inc., Eugene, OR.
9. CFTM is a trademark of Biotium, Inc.
10. When excited by the yellow-green (561-nm) laser, the fluorescence may be brighter than when excited by the blue (488-nm) laser.
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12. Because of the broad absorption spectrum of the tandem fluorochrome, extra care must be taken when using multi-laser cytometers, which may directly excite both PE and CFTM594.

References

BD Biosciences Pharmingen. Unpublished results. . (Biology)

Beck BN, Buerstedde JM, Krco CJ, Nilson AE, Chase CG, McKean DJ. Characterization of cell lines expressing mutant I-Ab and I-Ak molecules allows the definition of distinct serologic epitopes on A alpha and A beta polypeptides. *J Immunol.* 1986; 136(8):2953-2961. (Clone-specific: Flow cytometry)

Cohn LE, Glimcher LH, Waldmann RA, et al. Identification of functional regions on the I-Ab molecule by site-directed mutagenesis. *Proc Natl Acad Sci U S A.* 1986; 83(3):747-751. (Clone-specific: Flow cytometry)

Hattori M, Buse JB, Jackson RA, et al. The NOD mouse: recessive diabetogenic gene in the major histocompatibility complex. *Science.* 1986; 231(4739):733-735. (Biology)

Nabozny GH, Baisch JM, Cheng S, et al. HLA-DQ8 transgenic mice are highly susceptible to collagen-induced arthritis: a novel model for human polyarthritis. *J Exp Med.* 1996; 183(1):27-37. (Clone-specific: Flow cytometry)

Stall AM. Personal Communication. . (Biology)

Wall KA, Lorber MI, Loken MR, McClatchey S, Fitch FW. Inhibition of proliferation of Mls- and Ia-reactive cloned T cells by a monoclonal antibody against a determinant shared by I-A and I-E. *J Immunol.* 1983; 131(3):1056-1064. (Clone-specific: Flow cytometry)

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