Technical Data Sheet

R718 Mouse Anti-Mouse I-Ak

Product Information

Material Number:752256Size:50 μgClone:10-3.6Alternative Name:Aβk

Reactivity: Tested in Development:Mouse

 $\begin{tabular}{lll} Isotype: & Mouse CWB IgG2$\alpha, κ \\ Application: & Flow cytometry(Qualified) \\ \end{tabular}$

Concentration: 0.2 mg/ml

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

Regulatory Status: RUO

Description

The 10-3.6 monoclonal antibody specifically recognizes the β chain of the I-A[k] MHC class II alloantigen. It cross-reacts with splenocytes from mice of the H-2[f], H-2[r], and H-2[s] haplotypes, from nonobese diabetic (NOD, H-2[g7]) mice, and with lymph node cells of BN, DA, WRA, and WRC rats. Reactivity with other haplotypes (e.g., b, d, p, q) has not been observed. Long-term in vivo treatment with 10-3.6 mAb has been reported to prevent the spontaneous development of autoimmune insulin-dependent diabetes mellitus (IDDM) in female NOD mice.

The antibody was conjugated to BD Horizon Red 718, which has been developed exclusively for BD Biosciences as a better alternative to Alexa Fluor® 700. BD Horizon Red 718 can be excited by the red laser (628 – 640 nm) and, with an Em Max around 718 nm, it can be detected using a 730/45 nm filter. Due to similar excitation and emission properties, we do not recommend using R718 in combination with APC-R700 or Alexa Fluor® 700.

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 the dye under optimum conditions that minimize unconjugated dye and antibody.

Recommended Assay Procedure

BD™ CompBeads can be used as surrogates to assess fluorescence spillover (Compensation). When fluorochrome conjugated antibodies are bound to BD CompBeads, they have spectral properties very similar to cells. However, for some fluorochromes there can be small differences in spectral emissions compared to cells, resulting in spillover values that differ when compared to biological controls. It is strongly recommended that when using a reagent for the first time, users compare the spillover on cells and BD CompBead to ensure that BD CompBeads are appropriate for your specific cellular application.

Suggested Companion Products

Catalog Number	Name	Size
553141	Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block™)	0.1 mg
554656	Stain Buffer (FBS)	500 mL
554657	Stain Buffer (BSA)	500 mL
555899	Lysing Buffer	100 mL
566949	R718 Mouse IgG2a, к Isotype Control	50 μg

Product Notices

- 1. Researchers should determine the optimal concentration of this reagent for their individual applications.
- 2. The production process underwent stringent testing and validation to assure that it generates a high-quality conjugate with consistent performance and specific binding activity. However, verification testing has not been performed on all conjugate lots.

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- 3. An isotype control should be used at the same concentration as the antibody of interest.
- 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. Alexa Fluor® is a registered trademark of Life Technologies Corporation.
- 6. Please refer to http://regdocs.bd.com to access safety data sheets (SDS).
- 7. Please refer to www.bdbiosciences.com/us/s/resources for technical protocols.
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References

Oi VT, Jones PP, Goding JW, Herzenberg LA, Herzenberg LA. Properties of monoclonal antibodies to mouse Ig allotypes, H-2, and Ia antigens. Curr Top Microbiol Immunol. 1978; 81:115-129. (Immunogen).

Landias D, Beck BN, Buerstedde JM, et al.. The assignment of chain specificities for anti-Ia monoclonal antibodies using L cell transfectants. J Immunol. 1986; 137(9):3002-3005. (Biology).

Kupinski JM, Plunkett ML, Freed JH. Assignment of antigenic determinants to separated I-A kappa chains. J Immunol. 1983; 130(5):2277-2281. (Biology).

Boitard C, Bendelac A, Richard MF, Carnaud C, Bach JF. Prevention of diabetes in nonobese diabetic mice by anti-I-A monoclonal antibodies: transfer of protection by splenic T cells. Proc Natl Acad Sci U S A. 1988; 85(24):9719-9723. (Biology).

Blankenhorn EP, Symington FW, Cramer DV. Biochemical characterization of Ia antigens encoded by the RT1.B and RT1.D loci in the rat MHC. Immunogenetics. 1983; 17(5):475-484. (Biology).

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