

## Technical Data Sheet

## Purified Mouse Anti-Mouse I-E[k]

## Product Information

Material Number:	558734
Size:	0.1 mg
Concentration:	0.5 mg/ml
Clone:	14-4-4S
Immunogen:	C3H mouse skin graft and splenocytes
Isotype:	Mouse (C3H.SW) IgG2a, $\kappa$
Reactivity:	QC Testing: Mouse Reported: Rat
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

## Description

The 14-4-4S antibody reacts with the I-E[k] MHC class II alloantigen. It cross-reacts with cells from mice of the H-2[d], H-2[p], and H-2[r] haplotypes. Cells from mice of the H-2[b], H-2[f], H-2[g7], H-2[q], and H-2[s] haplotypes do not express I-E antigen. It has been reported that mAb 14-4-4S cross-reacts with the rat MHC class II antigen RT1D.

This antibody is routinely tested by flow cytometric analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.

## Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.  
Store undiluted at 4° C.

## Application Notes

## Application

Flow cytometry	Routinely Tested
Cytotoxicity	Reported
Immunoprecipitation	Reported
Induction	Reported
Blocking	Reported

## Suggested Companion Products

Catalog Number	Name	Size	Clone
553454	Purified Mouse IgG2a $\kappa$ Isotype Control	0.5 mg	G155-178
555988	FITC Goat Anti-Mouse IgG/IgM	0.5 mg	Polyclonal

## 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](http://www.bdbiosciences.com/pharmingen/protocols) for technical protocols.
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.
4. Sodium azide is a reversible inhibitor of oxidative metabolism; therefore, antibody preparations containing this preservative agent must not be used in cell cultures nor injected into animals. Sodium azide may be removed by washing stained cells or plate-bound antibody or dialyzing soluble antibody in sodium azide-free buffer. Since endotoxin may also affect the results of functional studies, we recommend the NA/LE™ (No Azide/Low Endotoxin) antibody format, if available, for in vitro and in vivo use.

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## References

- Bhattacharya A, Dorf ME, Springer TA. A shared alloantigenic determinant on Ia antigens encoded by the I-A and I-E subregions: evidence for I region gene duplication. *J Immunol.* 1981; 127(6):2488-2495.(Clone-specific: Immunoprecipitation)
- 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.(Clone-specific)
- Grakoui A, Bromley SK, Sumen C, et al. The immunological synapse: a molecular machine controlling T cell activation. *Science.* 1999; 285(5425):221-227. (Clone-specific: Immunoaffinity chromatography)
- Harton JA, Litaker W, Frelinger JA, Bishop GA. Structure function analysis of the H-2 Abp gene. *Immunogenetics.* 1991; 34(6):358-365.(Clone-specific: Induction)
- 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)
- Klein J. Mutations in H-2E loci. In: Klein J. *Natural History of the Major Histocompatibility Complex.* New York: John Wiley & Sons; 1986:216-218.(Biology)
- Lu L, Woo J, Rao AS, et al. Propagation of dendritic cell progenitors from normal mouse liver using granulocyte/macrophage colony-stimulating factor and their maturational development in the presence of type-1 collagen. *J Exp Med.* 1994; 179(6):1823-1834.(Clone-specific: Cytotoxicity)
- Neiss U, Reske K. Non-coordinate synthesis of MHC class II proteins and invariant chains by epidermal Langerhans cells derived from short-term in vitro culture. *Int Immunol.* 1994; 6(1):61-71.(Clone-specific: Immunoprecipitation)
- Ozato K, Mayer N, Sachs DH. Hybridoma cell lines secreting monoclonal antibodies to mouse H-2 and Ia antigens. *J Immunol.* 1980; 124(2):533-540.(Immunogen: Cytotoxicity)
- Roy M, Aruffo A, Ledbetter J, Linsley P, Kehry M, Noelle R. Studies on the interdependence of gp39 and B7 expression and function during antigen-specific immune responses. *Eur J Immunol.* 1995; 25(2):596-603.(Clone-specific: Blocking)