abcam

ab25585

PE Anti-MHC class II I E kappa antibody [14-4-4S]

Anti-MHC class II I E kappa antibody [14-4-4S] conjugated to PE - suitable for flow cytometry, and reacts with mouse samples. Clone [14-4-4S] is a mouse monoclonal antibody cited in 9 publications.

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Key facts

Isotype	IgG2a
Host species	Mouse
Conjugation	PE
Excitation/Emission	Ex: 480;565nm, Em: 578nm
Storage buffer	pH: 7.3 Preservative: 0.09% Sodium azide Constituents: PBS, 16% Sucrose
Form	Liquid
Clonality	Monoclonal
Immunogen	Tissue preparation containing MHC class II I E kappa protein. The exact immunogen used to generate this antibody is proprietary information.
Clone number	14-4-4S
Purification technique	Affinity purification Protein A
Specificity	This antibody is specific to an epitope on mouse I-E kappa MHC class II alloantigen. The antibody reacts with the I-E kappa class II alloantigen on cells from mice of the H-2^{d}, H-2^{p}, and H-2^{r} haplotypes. The antibody has also been reported to crossreact with the rat class II alloantigen RT1D.
Light chain type	kappa
Concentration	0.1 - 1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Mouse
Dilution info	-
Notes	-

Target data

See full target information H2-Eb1

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Store in the dark

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	MHC class II I-E kappa also known as I-Ek is a protein involved in the immune system's antigen-presenting function. It is part of the major histocompatibility complex (MHC) class II molecules which are important for presenting exogenous antigens to CD4+ T helper cells. MHC class II molecules have a molecular mass that ranges from 50 to 70 kDa. I-Ek is usually expressed on the surface of professional antigen-presenting cells like dendritic cells macrophages and B cells.
Biological function summary	I-Ek is involved in the immune response by forming a complex with peptides derived from external sources. This complex is then presented on the cell surface to facilitate recognition by CD4+ T helper cells which play a critical role in adaptive immunity. I-Ek's interactions are essential for triggering T cell-mediated immune

	responses important in fighting infections and maintaining immune tolerance. Researchers widely study this protein to understand immune response modulation.
Pathways	MHC class II I-Ek is a component of the antigen processing and presentation pathway critical in adaptive immune responses. Within this pathway the I-Ek protein interacts with the invariant chain and memory B cells to assist in antigen presentation. It also participates in the intricate network where it communicates with CD4+ receptor-bearing T cells important for effective immune system activation.
Associated diseases and disorders	MHC class II I-Ek has significant implications in autoimmune diseases such as rheumatoid arthritis and type 1 diabetes. Aberrant expression or malfunction of I-Ek can contribute to these conditions by promoting inappropriate immune responses against self-antigens. The protein interacts with other molecules like human leukocyte antigen (HLA) linked to autoimmunity serving as potential research targets for therapeutic intervention.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

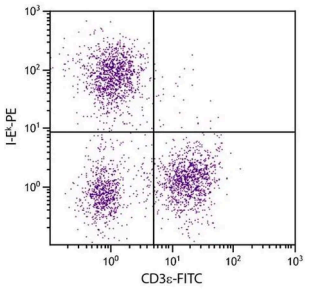
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

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1 product image



Flow Cytometry - PE Anti-MHC class II I E kappa antibody [14-4-4S] (ab25585)

MHC class II I E kappa Flow Cytometry staining using mouse Anti-MHC class II I E kappa antibody

Flow cytometric analysis of AKR mouse splenocytes labeling MHC class II E kappa using ab25585 at 0.1 µg/10^6 cells in 100 µl. CD3ε is labeled using a Rat Anti-Mouse CD3ε (FITC) antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.