Biotinylated Anti-mouse MHC Class I (H-2Kd, H-2Dd) Antibody (34-1-2S, Human IgG1 Fc Silent Kappa) | PA007855.h1Fs-b

Catalog No.: PA007855.h1Fs-b | **Isotype:** Human IgG1 Fc Silent Kappa | **Flow Cytometry Grade**

Recombinant anti-mouse MHC Class I (H-2Kd/H-2Dd) monoclonal antibody (Clone 34-1-2S, Biotinylated), engineered with a Human IgG1 Fc-Silent domain to minimize non-specific Fc receptor binding during cell surface analysis. Variable regions are derived from the classic mouse anti-mouse MHC Class I (H-2Kd/H-2Dd) clone 34-1-2S and recombinantly expressed in mammalian cells.

Product Specifications

Catalog No.	PA007855.h1Fs-b
Product Name	Biotinylated Recombinant Anti-mouse MHC Class I (H-2Kd, H-2Dd) Monoclonal Antibody (Clone: 34-1-2S), Human IgG1 Fc Silent Kappa
Clone & Isotype	34-1-2S | Human IgG1 Fc Silent Kappa
Applications	Flow cytometry (FC) with various dye conjugation through streptavidin; conjugation to streptavidin agarose beads or streptavidin magnetic beads.
Reactivity & Specificity	Mouse MHC Class I (H-2Kd, H-2Dd). The site-directed biotinylated recombinant 34-1-2S antibody specifically binds to mouse MHC Class I (H-2Kd, H-2Dd).
Source / Host	The site-directed biotinylated anti-mouse MHC Class I (H-2Kd, H-2Dd) monoclonal antibody (clone: 34-1-2S) was produced in mammalian cells.
Formulation & Conjugate	0.2 uM filtered solution, pH 7.4, no stabilizers or preservatives. Biotin-conjugated.
Purity	**>95%** by SDS-PAGE under reducing conditions and HPLC.
Shipping	The recombinant anti-mouse MHC Class I (H-2Kd, H-2Dd) monoclonal antibody of clone 34-1-2S is shipped with ice pack. Upon receipt, store it immediately at the recommended temperature.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70°C as supplied. 1 month from date of receipt, 2 to 8°C as supplied.

Biological Description & Background

Recombinant human IgG1 monoclonal antibody with site-directed biotinylation through the Avi tag at the C-terminus of the antibody heavy chain.

Major Histocompatibility Complex (MHC) Class I molecules are cell-surface glycoproteins expressed on virtually all nucleated cells, presenting endogenous peptide antigens to CD8+ cytotoxic T lymphocytes and interacting with NK cell receptors. The H-2Kd and H-2Dd alloantigens are specific MHC Class I molecules expressed in BALB/c and other d-haplotype mouse strains.

Monoclonal antibody 34-1-2S specifically recognizes a conformational epitope shared by H-2Kd and H-2Dd molecules. Engineered with a Human IgG1 Fc Silent domain, this antibody minimizes background Fc receptor interactions. C-terminal site-directed biotinylation via an Avi tag ensures uniform antibody orientation, enabling highly accurate detection, signal amplification, and cell separation using streptavidin-conjugated reagents in flow cytometry workflows.

Ordering & Technical Support

For custom volume ordering or inquiries, please visit the product webpage or contact our support team:

- **Product Webpage:** https://www.ushelf.com/biotinylated-anti-mouse-mhc-class-i-h-2kd-h-2dd-monoclonal-antibody-pa007855-h1fs-b/
- **Order Phone:** 1-617-401-8149 | **Fax:** 1-617-606-5019
- **Support Email:** message@sydlabs.com