Biotinylated Anti-mouse MHC Class I (H-2Kd) Antibody (SF1-1.1.10, Human IgG1 Fc Silent Kappa) | PA007881.h1Fs-b

Catalog No.: PA007881.h1Fs-b | **Isotype:** Human IgG1 Fc Silent Kappa | **Flow Cytometry Grade**

Recombinant anti-mouse MHC Class I (H-2Kd) monoclonal antibody (Clone SF1-1.1.1, Biotinylated), engineered with a Human IgG1 Fc-Silent domain to eliminate ADCC/CDC and 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) clone SF1-1.1.1 and recombinantly expressed in mammalian cells.

Product Specifications

Catalog No.	PA007881.h1Fs-b
Product Name	Biotinylated Recombinant Anti-mouse MHC Class I (H-2Kd) Monoclonal Antibody (Clone: SF1-1.1.10), Human IgG1 Fc Silent Kappa
Clone & Isotype	SF1-1.1.10 | 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). The site-directed biotinylated recombinant SF1-1.1.10 antibody specifically binds to mouse MHC Class I (H-2Kd).
Source / Host	The site-directed biotinylated anti-mouse MHC Class I (H-2Kd) monoclonal antibody (clone: SF1-1.1.10) 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) monoclonal antibody of clone SF1-1.1.10 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 H-2Kd is a cell-surface glycoprotein expressed on nucleated cells in mice of the d haplotype (e.g., BALB/c, NZB, B10.D2). It presents endogenous peptides to CD8+ cytotoxic T cells and acts as a ligand for NK cell receptors, playing a pivotal role in cellular immunity and transplantation biology.

Monoclonal antibody SF1-1.1.10 specifically reacts with the mouse H-2Kd MHC Class I alloantigen. Engineered with a Human IgG1 Fc Silent domain, this antibody minimizes background Fc receptor interactions. Site-directed biotinylation via a C-terminal Avi tag guarantees 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-monoclonal-antibody-pa007881-h1fs-b/
- **Order Phone:** 1-617-401-8149 | **Fax:** 1-617-606-5019
- **Support Email:** message@sydlabs.com