

Product Datasheet

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Anti-Human HLA-A, B, C (MHC Class I) [Clone W6/32] — PE

Monoclonal Antibody

Product Information

Product No.:	H202
Clone:	W6/32
RRID:	AB_2892887
Isotype:	Mouse Mouse IgG2a k
Storage:	Sterile 2-8°C

Product Description

Specificity:

Clone W6/32 recognizes the human MHC class I molecules HLA-A, -B, and -C.

Antigen Distribution:

HLA-A, -B, and -C are ubiquitously expressed on nucleated cells.

Background:

HLA antibody, clone W6/32, recognizes the major histocompatibility complex (MHC) class I molecules human leukocyte antigen (HLA)-A, HLA-B, and HLA-C. MHC class I is ubiquitously expressed on the cell surface of nucleated cells and consists of a 45-kDa type I transmembrane glycoprotein (α -chain or heavy chain) and a 12-kDa soluble protein (β 2-microglobulin, β 2M)^{1,2}. The α -chain consists of three domains (α 1, α 2, and α 3)³. α 1 and α 2 form the closed antigen-binding groove and bind to 8-10 aa peptides derived from cytosolic antigens⁴⁻⁶. β 2M noncovalently associates with α 3, which is essential for MHC stability. MHC class I plays a critical role in the adaptive immune response by presenting endogenous antigens to cytotoxic CD8 T cells. MHC class I molecules can also present exogenous antigens to CD8 T cells via a process known as cross-presentation⁷. The T cell receptor (TCR)/CD3 complex of CD8 T cells interacts with peptide-MHC class I, which induces CD8 T cell activation and subsequent cell-killing. CD8 molecules also bind to MHC class I, which helps augment TCR signaling⁸. In contrast to CD8 T cells, MHC class I is an inhibitory ligand for natural killer (NK) cells, promoting self tolerance⁹. MHC class I also contributes to the positive selection of CD8 T cells and NK cell specificity^{10,11}.

Known Reactivity Species:

Baboon, Chimpanzee, Cynomolgus Monkey, Feline, Bovine, Human

Format:

R-phycoerythrin (PE)

Immunogen:

Human tonsil cell membrane

Products are for research use only. Not for use in diagnostic or therapeutic procedures.

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Formulation

This R-phycoerythrin (R-PE) conjugate is formulated in 0.01 M phosphate buffered saline (150 mM NaCl) PBS pH 7.4, 1% BSA and 0.09% sodium azide as a preservative.

Storage and Stability

This R-phycoerythrin (R-PE) conjugate is stable when stored at 2-8°C. **Do not freeze.**

Applications

Applications and Recommended Usage (Quality Tested By Leinco):

FC The suggested concentration for this HLA-A,B,C Clone W6/32 antibody for staining cells in flow cytometry is 5.0 µg per 10⁶ cells in a volume of 100 µl or 100µl of whole blood. Titration of the reagent is recommended for optimal performance for each application.

Country of Origin

USA

References

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