

ProteinFind® Anti-CD8 Mouse Monoclonal Antibody

Please read the datasheet carefully prior to use.

Cat. No. HI105

Version No. Version 2.0

Storage: PBS (pH7.4), 0.05% ProClin 300, 50% Glycerol; at -20°C for two years, avoid repeated freeze-thawing.

Description

CD8 molecule is a kind of leukocyte differentiation antigen, a glycoprotein on the surface of some T cells, which is used to assist T cell receptor (TCR) to recognize the antigen and participate in the transduction of T cell activation signal, also known as the co-receptor of TCR. There are two forms of CD8, either as an $\alpha\alpha$ homodimer encoded by the leu-2a gene or $\alpha\beta$ heterodimer encoded by the leu-2a gene and the leu-2b gene respectively. CD8 molecules are distributed on the surface of some T cells and thymocytes, accounting for about 20% to 35% of human peripheral blood lymphocytes. CD8+T cells usually differentiate into cytotoxic T lymphocyte (CTL) after activation, which can kill target cells specifically. CD8 α/α molecules are expressed in $\alpha\beta$ T cells and $\gamma\delta$ T cells as well as some NK cells. Soluble CD8 α or β chains (sCD8) exist in serum through different splicing of mRNA^[1]. CD8 molecule is the co-receptor of MHC class I-restricted T cells recognition antigen. This molecule binds to the heavy chain non-polymorphic $\alpha 3$ of MHC class I molecule through α chain V-like region, which can not only stabilize CTL's recognition of target cells or binding to APC, but also play an important role in the thymus selection of CD8 positive cells^[2]. In addition, CXCP in the α -chain cytoplasmic region is linked to PTK p56Lck, which can also participate in T cell activation signal transmission^[3]. This product is the mouse anti-human CD8 monoclonal antibody, which is used for the specific detection of human CD8 by FC.

Species Reactivity: Human

Clone Number: Trans-8B9

Antibody Subtype: Mouse IgG2a

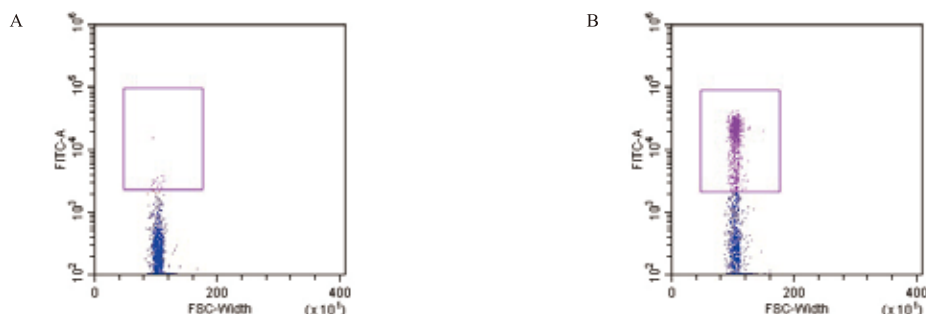
Immunogen

- Entrez Gene ID: 925
- UniProt ID: P01723

Applicable Experiments and Dilution

- FC: 1:100 dilution is recommended.

Positive Control Cell Line: Human peripheral blood mononuclear cells



FC: ProteinFind® Anti-CD8 Mouse Monoclonal Antibody for FC detection of human peripheral blood.

The negative control: Mouse IgG2a Isotype Control (figure A), ProteinFind® Anti-CD8 Mouse Monoclonal Antibody (figure B).

Dilution ratio of primary antibody: 1:100



References

- [1] Cole DK, Gao GF. CD8: adhesion molecule, co-receptor and immuno-modulator [J]. Cell Mol Immunol. 2004, 1(2):81-8.
- [2] Gao GF, Jakobsen BK. Molecular interactions of coreceptor CD8 and MHC class I: the molecular basis for functional coordination with the T-cell receptor [J]. Immunol Today. 2000, 21(12): 630-6.
- [3] Barber EK, Dasgupta JD, Schlossman SF, et al. The CD4 and CD8 antigens are coupled to a protein-tyrosine kinase (p56lck) that phosphorylates the CD3 complex [J]. Proc Natl Acad Sci USA, 1989, 86(9): 3277-81.

For research use only, not for clinical diagnosis.

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