Anti-Human CD8 (Clone SK1) - Purified No Carrier Protein

Hybridoma Monoclonal Antibody

Product Information

Product No.: C3360

Clone: SK1

Isotype: Mouse Mouse IgG1 κ

Product Description

Specificity:
SK1 activity is directed against human CD8a.

Antigen Distribution:
CD8 is present on thymocytes, T lymphocytes, and natural killer cells.

Background:
CD8 is an integral membrane protein essential to immune response that acts as a co-receptor for the MHC class I molecule: peptide complex[1]. CD8 recruits the Src kinase LCK to the vicinity of the TCR-CD3 complex, leading to activation of cytotoxic T-lymphocytes which recognize and eliminate infected cells and tumor cells. $CD8^+$ T cell differentiation is tightly regulated, and the T cell response depends on the antigen encounter. Immune response to acute infection,autoimmunity, graft vs host disease, tumors, chronic infection, and self-tolerance are all affected by $CD8^+$ T cells[2].

When expressed on thymus-derived T cells, CD8 molecules are seen as CD8α/CD8β heterodimers, while they are CD8α homodimers when expressed on intraepithelial lymphocytes from the gut, $CD8^+$ dendritic cells[3], or a subset of human natural killer cells[4]. Gene expression is closely regulated with CD4, with expression of CD4 and CD8 used to distinguish the four major stages of T cell development[4].

SK1 blocks MHC-peptide tetramer binding to the TCR, and the effect is not due to steric hindrance[5,6]. SK1 is commonly used as a marker in flow cytometry experiments[5,7-12].

Known Reactivity Species:
Human

Format:
Purified No Carrier Protein

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

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Immunogen:
Recombinant protein of human CD8

Formulation
This monoclonal antibody is aseptically packaged and formulated in 0.01 M phosphate buffered saline (150 mM NaCl) PBS pH 7.2 - 7.4 with no carrier protein, potassium, calcium or preservatives added.

Purity
≥90% monomer by analytical SEC and SDS-Page

Storage and Stability
This antibody may be stored sterile as received at 2-8°C for up to one month. For longer term storage, aseptically aliquot in working volumes without diluting and store at -80°C. **Avoid Repeated Freeze Thaw Cycles.**
Other Applications Reported in Literature:

FC,
IHC,

Country of Origin
USA

References
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