

Product datasheet for SM3102B

OriGene Technologies, Inc.

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CD8A Mouse Monoclonal Antibody [Clone ID: MEM-31]

Product data:

Product Type: Primary Antibodies

Clone Name: MEM-31

Applications: FC

Recommended Dilution: Flow cytometry (recommended starting dilution: 1:2500).

The antibody does not react with formaldehyde-fixed cells; negative in Western

Blotting application.

Reactivity: Human
Host: Mouse
Isotype: IgG2a

Clonality: Monoclonal

Immunogen: Crude thymus membrane fraction

Specificity: This antibody recognizes a conformationally-dependent epitope of CD8, a cell surface

glycoprotein found on most cytotoxic T lymphocytes that mediates efficient cell-cell

interactions within the immune system. CD8 is a disulfide-linked dimer and exists as a CD8 α

homodimer or CD8 α/β heterodimer (each monomer approx. 32-34 kDa).

Formulation: Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4

Label: Biotin

State: Liquid purified Ig fraction

Label: Conjugated with Biotin-LC-NHS under optimum conditions. The reagent is free of

unconjugated biotin.

Concentration: lot specific
Conjugation: Biotin

Storage: Store the antibody undiluted at 2 - 8 °C. DO NOT FREEZE!

Stability: Shelf life: one year from despatch.

Gene Name: CD8a molecule

Database Link: Entrez Gene 925 Human

P01732





Background:

The CD8 T cell coreceptor (monomer approx. 32-34 kDa) is expressed as $\alpha\beta$ heterodimer on majority of MHC I-restricted conventional T cells and thymocytes and as $\alpha\alpha$ homodimer on subsets of memory T cells, intraepithelial lymphocytes, NK cells and dendritic cells. Regulation of CD8 β level on T cell surface seems to be an important mechanism to control their effector function. Assembly of CD8 α - β but not α - α dimers is connected with formation or localization to the lipid rafts. Recruiting triggered TCR complexes to these membrane microdomains as well as affinity of TCR to MHC I is modulated by CD8, thereby affecting the functional diversity of the TCR signaling.

Synonyms: CD8 alpha chain, CD8A, MAL

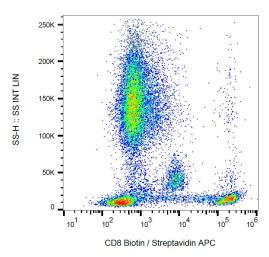
Protein Families: Adult stem cells, Druggable Genome, ES Cell Differentiation/IPS, Secreted Protein,

Transmembrane

Protein Pathways: Antigen processing and presentation, Cell adhesion molecules (CAMs), Hematopoietic cell

lineage, Primary immunodeficiency, T cell receptor signaling pathway

Product images:



Surface staining of human peripheral blood using anti-human CD8 (clone MEM-31) biotin.