CD8 monoclonal antibody, clone MEM-31 (APC)

Catalog # MAB4591 Size 100 Reactions

Specification

Product Description	Mouse monoclonal antibody raised against native CD8.
Immunogen	Native purified CD8 from Crude thymus membrane fraction.
Host	Mouse
Reactivity	Human
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 alpha/alpha homodimer or CD8 alpha/beta heterodimer (each monomer approx. 32-34 KDa). This antibody does not react with formaldehyde-fixed cells; negative in Western Blot application.
Form	Liquid
Conjugation	APC
Isotype	IgG2a
Recommend Usage	Flow Cytometry (10 ul in human blood cells 100 ul in whole blood or 10^6 cells in a suspension) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.2% BSA, 0.09% sodium azide)
Storage Instruction	Store in the dark at 4°C. Do not freeze. Avoid prolonged exposure to light. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Flow Cytometry

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Gene Info — CD8A

Entrez GeneID	925
Gene Name	CD8A
Gene Alias	CD8, Leu2, MAL, p32
Gene Description	CD8a molecule
Omim ID	186910 608957
Gene Ontology	Hyperlink
Gene Summary	The CD8 antigen is a cell surface glycoprotein found on most cytotoxic T lymphocytes that mediates efficient cell-cell interactions within the immune system. The CD8 antigen acts as a corepressor with the T-cell receptor on the T lymphocyte to recognize antigens displayed by an antigen presenting cell (APC) in the context of class I MHC molecules. The coreceptor functions as either a homodimer composed of two alpha chains, or as a heterodimer composed of one alpha and one beta chain. Both alpha and beta chains share significant homology to immunoglobulin variable light chains. This gene encodes the CD8 alpha chain isoforms. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq
Other Designations	CD8 antigen alpha polypeptide|CD8 antigen, alpha polypeptide (p32)|Leu2 T-lymphocyte antigen|OKT8 T-cell antigen|T cell co-receptor|T-cell antigen Leu2|T-cell surface glycoprotein CD8 alpha chain|T-lymphocyte differentiation antigen T8/Leu-2|T8 T-cell ant

Gene Info — CD8B

Entrez GeneID	926
Gene Name	CD8B
Gene Alias	CD8B1, LYT3, Leu2, Ly3, MGC119115
Gene Description	CD8b molecule
Omim ID	186730
Gene Ontology	Hyperlink

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Gene Summary	The CD8 antigen is a cell surface glycoprotein found on most cytotoxic T lymphocytes that mediates efficient cell-cell interactions within the immune system. The CD8 antigen, acting as a coreceptor, and the T-cell receptor on the T lymphocyte recognize antigen displayed by an antigen presenting cell (APC) in the context of class I MHC molecules. The functional coreceptor is either a homodimer composed of two alpha chains, or a heterodimer composed of one alpha and one beta chain. Both alpha and beta chains share significant homology to immunoglobulin variable light chains. This gene encodes the CD8 beta chain isoforms. Multiple alternatively spliced transcript variants encoding distinct membrane associated or secreted isoforms have been described. A pseudogene, also located on chromosome 2, has been identified. [provided by RefSeq
Other Designations	CD8 antigen, beta polypeptide (p37)|CD8 antigen, beta polypeptide 1 (p37)|CD8b antigen|OTTHUMP00000160761|T lymphocyte surface glycoprotein beta chain|T-cell surface glycoprotein CD8 beta chain

Publication Reference

- Coreceptor CD8-driven modulation of T cell antigen receptor specificity.

  van den Berg HA, Wooldridge L, Laugel B, Sewell AK.

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- CD8 Raft localization is induced by its assembly into CD8alpha beta heterodimers, Not CD8alpha alpha homodimers.

  Pang DJ, Hayday AC, Bijlmakers MJ.

  The Journal of Biological Chemistry 2007 May; 282(18):13884.

- Monoclonal antibodies against human leucocyte antigens. II. Antibodies against CD45 (T200), CD3 (T3), CD43, CD10 (CALLA), transferrin receptor (T9), a novel broadly expressed 18-kDa antigen (MEM-43) and a novel antigen of restricted expression (MEM-74).

  Horejsí V, Angelisová P, Bazil V, Kristofová H, Stoyanov S, Stefanová I, Hausner P, Vosecký M, Hilgert I.

  Folia Biol (Praha) 1988 Jan; 34(1):23.

Pathway

- Antigen processing and presentation
- Antigen processing and presentation
- Cell adhesion molecules (CAMs)
- Cell adhesion molecules (CAMs)

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- Hematopoietic cell lineage
- Hematopoietic cell lineage
- Primary immunodeficiency
- Primary immunodeficiency
- T cell receptor signaling pathway
- T cell receptor signaling pathway

Disease

- Tobacco Use Disorder

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