

# Product datasheet

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# ARG62928 anti-CD8 antibody [MEM-31]

Package: 100 μg, 50 μg

Store at: -20°C

#### Summary

Product Description Mouse Monoclonal antibody [MEM-31] recognizes CD8

Tested Reactivity Hu

Tested Application CyTOF®-candidate, FACS, IP

Specificity The clone MEM-31 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).

does not react with formaldehyde-fixed cells; negative in Western Blotting application.

HLDA III; WS Code T 575

Host Mouse

Clonality Monoclonal
Clone MEM-31

Isotype IgG2a
Target Name CD8

Immunogen Crude thymus membrane fraction.

Conjugation Un-conjugated

Alternate Names T-cell surface glycoprotein CD8 alpha chain; Leu2; p32; T-lymphocyte differentiation antigen T8/Leu-2;

CD8; MAL; CD antigen CD8a

#### **Application Instructions**

Application table	Application	Dilution
	CyTOF®-candidate	Assay-dependent
	FACS	1 μg/ml
	IP	Assay-dependent
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

### **Properties**

Form	Liquid	
Purification	Purified from ascites by protein-A affinity chromatography.	
Purity	> 95% (by SDS-PAGE)	
Buffer	PBS (pH 7.4) and 15 mM Sodium azide	
Preservative	15 mM Sodium azide	

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Concentration 1 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

Note For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Database links <u>GeneID: 925 Human</u>

Swiss-port # P01732 Human

Gene Symbol CD8A

Gene Full Name CD8a molecule

Background 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 coreceptor with the T-cell receptor on the T lymphocyte to recognize antigens displayed by an antigen presenting cell 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. Multiple transcript variants encoding different isoforms have been found for this gene.

[provided by RefSeq, Nov 2011]

**Function** CD8 is an integral membrane glycoprotein that plays an essential role in the immune response and

serves multiple functions in responses against both external and internal offenses. In T-cells, functions primarily as a coreceptor for MHC class I molecule:peptide complex. The antigens presented by class I peptides are derived from cytosolic proteins while class II derived from extracellular proteins. Interacts simultaneously with the T-cell receptor (TCR) and the MHC class I proteins presented by antigen presenting cells (APCs). In turn, recruits the Src kinase LCK to the vicinity of the TCR-CD3 complex. LCK then initiates different intracellular signaling pathways by phosphorylating various substrates ultimately leading to lymphokine production, motility, adhesion and activation of cytotoxic T-lymphocytes (CTLs). This mechanism enables CTLs to recognize and eliminate infected cells and tumor cells. In NK-cells, the presence of CD8A homodimers at the cell surface provides a survival mechanism allowing conjugation

differentiation of activated lymphocytes into memory CD8 T-cells. [UniProt]

differentiation of activated lymphocytes into memory CD8 1-cens. [Online of]

**Highlight** Related Antibody Duos and Panels:

ARG30162 Cytotoxic T Cell Surface Marker Antibody Panel (FACS)

Related products:

CD8 antibodies; CD8 ELISA Kits; CD8 Duos / Panels; Anti-Mouse IgG secondary antibodies;

and lysis of multiple target cells. CD8A homodimer molecules also promote the survival and

Related news:

New antibody panels and duos for Tumor immune microenvironment

<u>Tumor-Infiltrating Lymphocytes (TILs)</u>
<u>Detecting exosomal HMGB1 for ICD research</u>

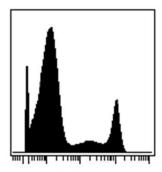
Research Area Developmental Biology antibody; Immune System antibody; Cytotoxic T antibody; Cytotoxic T Cell

Surface Study antibody; Tumor-infiltrating Lymphocyte Study antibody

Calculated Mw 26 kDa

PTM All of the five most C-terminal cysteines form inter-chain disulfide bonds in dimers and higher

multimers, while the four N-terminal cysteines do not.



CD8 Sm152

## ARG62928 anti-CD8 antibody [MEM-31] CyTOF image

CyTOF: PBMC (after FicoII-Paque separation) stained with ARG62928 anti-CD8 antibody [MEM-31] (Sm152). Singlet cells were gated for data analysis.