

# Product datasheet

info@arigobio.com

# ARG41757 anti-CD8 / CD8 alpha antibody

Package: 100 μl Store at: -20°C

### **Summary**

Product Description Rabbit Polyclonal antibody recognizes CD8 / CD8 alpha

Tested Reactivity Hu

Tested Application ICC/IF, IHC-P, WB

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name CD8 / CD8 alpha

Species Human

Immunogen Synthetic peptide of Human CD8 / CD8 alpha.

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
	ICC/IF	1:50 - 1:200
	IHC-P	1:50 - 1:200
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Jurkat	
Observed Size	~ 32 kDa	

#### **Properties**

Form Liquid

Purification Affinity purified.

Buffer PBS (pH 7.4), 150 mM NaCl, 0.02% Sodium azide and 50% Glycerol.

Preservative 0.02% Sodium azide

Stabilizer 50% Glycerol

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. 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.

#### Bioinformation

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

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

Highlight Related products:

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

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

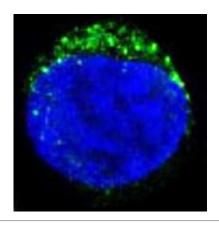
Calculated Mw 26 kDa

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. [UniProt]

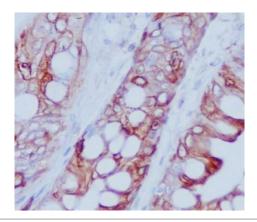
Cellular Localization Isoform 1: Cell membrane; Single-pass type I membrane protein. Note=CD8A localizes to lipid rafts only

when associated with its partner CD8B. Isoform 2: Secreted. [UniProt]



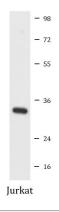
# ARG41757 anti-CD8 / CD8 alpha antibody ICC/IF image

Immunofluorescence: Jurkat cells stained with ARG41757 anti-CD8 / CD8 alpha antibody (green). Nuclear staining (blue).



# ARG41757 anti-CD8 / CD8 alpha antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human colon tissue stained with ARG41757 anti-CD8 / CD8 alpha antibody.



# ARG41757 anti-CD8 / CD8 alpha antibody WB image

Western blot: Jurkat cell lysate stained with ARG41757 anti-CD8  $\!\!/$  CD8 alpha antibody.