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CD8 alpha Recombinant Rabbit mAb

Catalog # AP96742

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	P01731
Other Accession	P01731
Reactivity	Mouse
Host	Rabbit
Clonality	Recombinant
Calculated MW	27456
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from mouse CD8 alpha
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 Ig-like V-type (immunoglobulin-like) domain.
SUBUNIT	In general heterodimer of an alpha and a beta chain linked by two disulfide bonds. Can also form homodimers.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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 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. The major protein isoforms of this gene differ by the presence or absence of a transmembrane domain and thus differ in being a membrane-anchored or secreted protein. [provided by RefSeq, May 2020]

Additional Information

Gene ID	12525
Other Names	CD8; CD8alpha; IMD116; Leu2; p32; Ly-2; Ly-35; Ly-B; Lyt-2; CD8A_HUMAN; CD8A; T-lymphocyte differentiation antigen T8/Leu-2; MAL; CD8A_MOUSE; T-cell surface glycoprotein Lyt-2; Lyt2; G1SX34_RABIT; CD8 subunit alpha; CD8 antigen, alpha polypeptide (p32); T-cell surface glycoprotein CD8 alpha chain; CD8a molecule
Dilution	IHC-P=1:200-500,IHC-F=1:200-500,IF=1:200-500,WB=1:1000-5000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	Cd8a
Synonyms	Lyt-2, Lyt2
Function	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.
Cellular Location	Cell membrane {ECO:0000250|UniProtKB:P01732}; Single-pass type I membrane protein {ECO:0000250|UniProtKB:P01732} Note=Cd8a localizes to lipid rafts only when associated with its partner Cd8b. {ECO:0000250|UniProtKB:P01732}

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.