ARG70482
Mouse CD8a recombinant protein (His-tagged)

Package: 100 µg
Store at: -20°C

Summary

Product Description	HEK293 expressed, His-tagged Mouse CD8a recombinant protein.
Tested Application	SDS-PAGE
Target Name	CD8a
Species	Mouse
A.A. Sequence	Met1 - Tyr196
Expression System	HEK293
Alternate Names	CD8A; CD8 Subunit Alpha; T-Cell Surface Glycoprotein CD8 Alpha Chain; CD8alpha; P32; T-Lymphocyte Differentiation Antigen T8/Leu-2; CD8 Antigen, Alpha Polypeptide (P32); CD8a Molecule; CD8; Leu2 T-Lymphocyte Antigen; OKT8 T-Cell Antigen; T-Cell Antigen Leu2; T Cell Co-Receptor; T8 T-Cell Antigen; CD8a Antigen; IMD116; Leu2; MAL

Properties

Form	Powder
Purification Note	Endotoxin level is < 0.1 EU/µg of the protein, as determined by the LAL test.
Purity	> 95% (by SDS-PAGE)
Buffer	PBS (pH 7.4)
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile water to a concentration not less than 200 µg/mL and incubate the stock solution for at least 20 min at room temperature to make sure the protein is dissolved completely.
Storage instruction	For long term, lyophilized protein should be stored at -20°C or -80°C. After reconstitution, aliquot and store at -20°C or -80°C for up to one month. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	CD8A
Gene Full Name	CD8 Subunit Alpha
Background	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]
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.[Uniprot]