

DESCRIPTION

Source	Human embryonic kidney cell, HEK293-derived mouse CD8 protein		
	Mouse CD8 alpha (Lys28-Tyr196) Accession # NP_033987.1	Acidic Tail	6-His tag
	Mouse CD8 beta (Leu22-Thr175) Accession # P10300.1	Basic Tail	FLAG (DYKDDDDK)
	N-terminus		C-terminus
N-terminal Sequence Analysis	Lys28 (CD8 alpha) & Leu22 (CD8 beta)		
Structure / Form	Disulfide-linked heterodimer		
Predicted Molecular Mass	28 kDa (CD8 alpha) & 27 kDa (CD8 beta)		

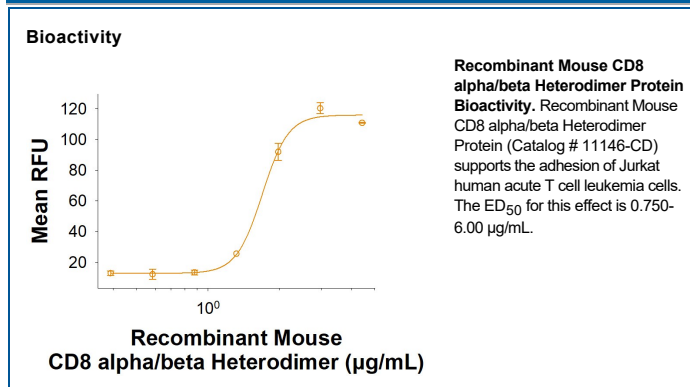
SPECIFICATIONS

SDS-PAGE	33-37 kDa & 45-51 kDa, under reducing conditions.
Activity	Measured by its ability of the immobilized protein to support the adhesion of Jurkat human acute T cell leukemia cells. The ED ₅₀ for this effect is 0.750-6.00 µg/mL.
Endotoxin Level	<0.10 EU per 1 µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 500 µg/mL in PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 3 months, -20 to -70 °C under sterile conditions after reconstitution.

DATA



BACKGROUND

CD8, also known as Ly2 or Leu2, is a heterodimeric glycoprotein (alpha and beta subunits) that functions in conjunction with the T cell receptor in the recognition of MHC class I/peptide complexes (1, 2). CD8 alpha is expressed on double positive (CD4⁺ CD8⁺) thymocytes and mature CD8⁺ cytolytic T cells (CTL) (3-5), intraepithelial lymphocytes (IEL) (6), some $\gamma\delta$ T cells (7), subsets of thymic and splenic dendritic cells (DC) (8), and peritoneal mast cells (9). It can form disulfide linked homodimers or heterodimers with CD8 β (10). Thymic CD8⁺ DC express primarily $\alpha\beta$ heterodimers, while splenic CD8⁺ DC primarily express $\alpha\alpha$ homodimers (8). CD8 α ⁺ DC can present viral antigenic peptides in complex with MHC I and prime CTL responses (11).

References:

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