

DESCRIPTION

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|---------------|---|-------------|--------------------|
| Source | Human embryonic kidney cell, HEK293-derived | | |
| | Human CD8 alpha (Ser22-Asp182) Accession # P01732 | Acidic Tail | HHHHHH |
| | Human CD8 beta (Asn19-Pro170) Accession # P10966 | Basic Tail | FLAG (DYKDDDDK) |
| | N-terminus | | C-terminus |

| | |
|-------------------------------------|--|
| N-terminal Sequence Analysis | Ser22 (CD8 alpha) & Asn19 (CD8 beta) |
| Structure / Form | Disulfide-linked heterodimer |
| Predicted Molecular Mass | 26 kDa (CD8 alpha) & 26 kDa (CD8 beta) |

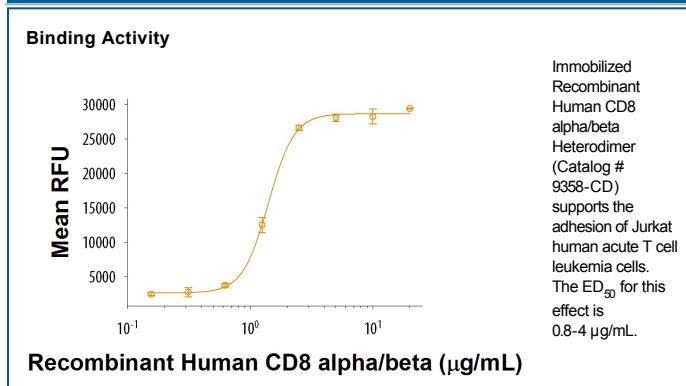
SPECIFICATIONS

| | |
|------------------------|--|
| SDS-PAGE | 32-43 kDa, reducing conditions |
| Activity | Measured by its ability of the immobilized protein to support the adhesion of Jurkat human acute T cell leukemia cells. Bechard, D. <i>et al.</i> (2001) J. Immunol. 167 :3099. The ED ₅₀ for this effect is 0.8-4 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. See Certificate of Analysis for details. |

PREPARATION AND STORAGE

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| 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 | <p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <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). The approximately 35 kDa mature mouse CD8 α consists of a 169 amino acid (aa) extracellular domain (ECD) with one Iglike domain, a 21 aa transmembrane segment, and a 30 aa cytoplasmic domain (12). Within the ECD, mouse CD8 α shares 49% and 64% aa sequence identity with human and rat CD8 α , respectively.

References:

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