

32-20651: Recombinant Human sCD8Alpha (Discontinued)

Alternative Name : CD8A, T-cell surface glycoprotein CD8 alpha chain, T-lymphocyte differentiation antigen T8/Leu-2

Description

Source:CHO cells

Cluster of differentiation 8 (CD8), a type I transmembrane glycoprotein of the immunoglobulin family of receptors, plays an integral role in signal transduction, and T cell differentiation and activation. CD8 is predominantly expressed on T cells as a disulfide-linked heterodimer of CD8Alpha and CD8Beta, where it functions as a co-receptor, along with T cell receptor (TCR), for major histocompatibility complex class I (MHC-I) molecules; whereas its counterpart, CD4, acts as a co-receptor for MHC-II molecules. CD8 exists on the cell surface, where the CD8Alpha chain is essential for binding to MHC-I. CD8 is also expressed on a subset of T cells, NK cells, monocytes and dendritic cells as disulfide-linked homodimers of CD8Alpha. Ligation of MHC-I/peptide complexes presented by antigen-presenting cells (APCs), triggers the recruitment of lymphocyte-specific protein tyrosine kinase (Lck), which leads to lymphokine production, motility and cytotoxic T lymphocyte (CTL) activation. Once activated, CTLs play a crucial role in the clearance of pathogens and tumor cells. Differentiation of na⁺ve CD8+ T cells into CTLs is strongly enhanced by IL-2, IL-12 and TGF-Beta 1. The CHO cell-derived Recombinant Human sCD8Alpha is a monomeric glycoprotein of 161 amino acid residues, which corresponds to the extracellular domain of CD8Alpha. The CHO cell-derived Recombinant Human sCD8Alpha has a calculated molecular weight of 17.6 kDa; however, due to glycosylation, it migrates at an apparent molecular weight of approximately 27-29 kDa by SDS-PAGE analysis, under reducing conditions.

Product Info

Amount : 10 µg / 50 µg

Purification : Purity: >= 95% by SDS-PAGE gel and HPLC analyses.

Content : This recombinant protein is supplied in lyophilized form.

Amino Acid : SQFRVSPLDR TWNLGETVEL KCQVLLSNPT SGCSWLFQPR GAAASPTFLL YLSQNKPKAA EGLDTQRFSG
KRLGDTFVLT LSDFRRENEG YYFCSALSNS IMYFSHFVPV FLPKPTTTP APRPPTPAPT IASQPLSLRP
EACRPAAGGA VHTRGLDFAC D

Application Note

Determined by its ability to induce plate adhesion of PHA-stimulated Jurkat cells.