

## PE Human CD4 (C-Fc)

<b>Catalog Number:</b>	811201, 811202
<b>Size:</b>	25 ug, 100 ug
<b>Target Name:</b>	CD4, CD4mut, LEU3
<b>Regulatory Status:</b>	RUO

### PRODUCT DETAILS

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<b>Application:</b>	Flow Cytometry
<b>Format:</b>	Liquid, PE
<b>Expression Host:</b>	CHO
<b>Species:</b>	Human
<b>Sources:</b>	Recombinant Human CD4 Protein ( Lys26-Trp390) with C-terminus Fc-tag is expressed in CHO cell and conjugated to PE.
<b>Accession Number:</b>	P01730
<b>Molecular Weight:</b>	The protein has a predicted molecular weight of 66.9 kDa. Under DTT-reducing conditions, it migrates at approximately 80 kDa on SDS-PAGE prior to conjugation.
<b>Affinity Tag:</b>	C-Fc
<b>Formulation:</b>	1xPBS buffer, pH7.4, 0.09% NaN3 with a carrier protein
<b>Endotoxin level:</b>	Not tested
<b>Protein Concentration:</b>	25µg size is bottled at 0.1mg/mL concentration. 100 µg size is bottled at lot specific concentration.
<b>Storage and Handling:</b>	Briefly centrifuge the vial upon receipt. An unopened vial may be stored at 2-8°C for up to six months.

### BACKGROUND INFORMATION

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CD4 is a single-pass type I transmembrane glycoprotein belonging to the immunoglobulin superfamily, composed of one Ig-like V-type and three Ig-like C2-type domains. It is expressed on helper T cells, regulatory T cells, monocytes, macrophages, and dendritic cells, functioning as a co-receptor for the T-cell receptor (TCR) by binding MHC class II molecules on antigen-presenting cells to enhance TCR signaling. CD4 also serves as the primary receptor for HIV-1, binding to viral gp120 to mediate viral entry. HIV-1 viral protein U (VpU) binds to the membrane-proximal region of CD4's cytoplasmic domain, promoting its degradation in the endoplasmic reticulum and preventing surface expression, aiding viral immune evasion. CD4 plays a central role in T-cell activation and HIV infection and is a key focus in immunological and virological research.