# Recombinant Human CD4/LEU3 Protein (His Tag)

### Catalog No. PKSH033506

*Note:* Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Synonyms	T-cell surface glycoprotein CD4;T-cell surface antigen T4/Leu-3;CD4;Scd4;CD4mut
Species	Human
Expression Host	HEK293 Cells
Sequence	Lys26-Trp390
Accession	P01730
Calculated Molecular Weight	41.7 kDa
Observed molecular weight	58 kDa
Tag	C-His
Bioactivity	Not validated for activity
Properties	
Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per $\mu$ g of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.
Data	



>95 % as determined by reducing SDS-PAGE.

## Background

CD4 is an approximately 55 kDa type I transmembrane glycoprotein that is expressed predominantly on thymocytes and a

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subset of mature T lymphocytes. It is a standard phenotype marker for the identification of T cell populations. Mature human CD4 consists of a 371 amino acid extracellular region containing four immunoglobulin-like domains; a 22 aa transmembrane segment; and a 40 aa cytoplasmic domain. CD4 is expressed along with CD8 on double positive T cells during their development in the thymus. CD4 binds directly to MHC class II molecules on antigen presenting cells (10). This interaction contributes to the formation of the immunological synapse which is focused around the TCR-MHC class II-antigenic peptide interaction. CD4 also functions as a chemotactic receptor for IL-16 and; in human; as a co-receptor for the gp120 surface glycoprotein of HIV-1.

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