



Recombinant Protein Technical Manual
Recombinant Human CD4/LEU3 Protein (His Tag)
RPES4498

Product Data:

Product SKU: RPES4498

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: P01730

Protein Information:

Molecular Mass: 41.7 kDa

AP Molecular Mass: 58 kDa

Tag: C-His

Bio-activity:

Purity: > 95% as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°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.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: T-cell surface glycoprotein CD4;T-cell surface antigen T4/Leu-3;CD4;Scd4;CD4mut

Immunogen Information:

Sequence: Lys26-Trp390

Background:

CD4 is an approximately 55 kDa type I transmembrane glycoprotein that is expressed predominantly on thymocytes and a 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 IL6 and, in human, as a co-receptor for the gp120 surface glycoprotein of HIV.