Recombinant CD4 protein (His tag)

Catalog Number	539670
Synonyms	T-cell surface antigen T4/Leu-3; CD antigen CD4
Species	Human
Expression System	E. coli
Accession	P01730
Molecular Weight	Predictes a molecular mass of 42.96 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 43 kDa band.

Product Information

Sequence Region	26-396
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 26-396 aa (P01730) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human CD4 Protein (Fragment 26-396) is a high-purity, functional fragment encompassing the extracellular Ig-like domains (V-type and C2-type) of T-cell surface glycoprotein CD4. This product is ideal for studying T-cell receptor coreceptor activity, immune signaling pathways, and host-pathogen interactions, providing researchers with a reliable tool for immunology and infectious disease research. CD4 is an integral membrane glycoprotein essential for adaptive immune responses. It functions primarily as a coreceptor for MHC class II:peptide complexes on antigen-presenting cells, facilitating T-cell receptor signaling by recruiting the Src kinase LCK to initiate intracellular pathways leading to T-helper cell activation, cytokine production, and immune regulation. CD4 also participates in T-cell development in the thymus and monocyte-to-macrophage differentiation. Additionally, it serves as the primary receptor for human immunodeficiency virus-1 (HIV-1) and human herpesvirus 7 (HHV-7), with subcellular localization to the plasma membrane and lipid rafts, where it can be down-modulated by viral proteins such as HIV-1 Nef and gp160.