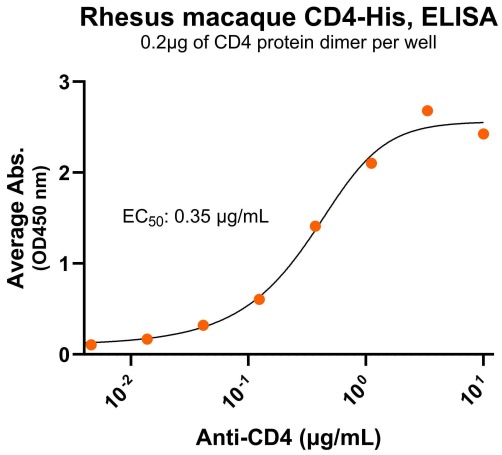
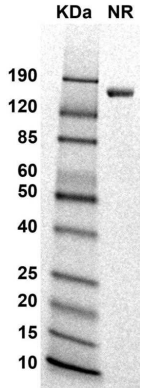
Rhesus macaque CD4 Protein Dimer, His Tag
Product Code: CSP-24038
For Research Use Only (RUO)

Bioactivity – Antibody Binding



Immobilized Rhesus macaque CD4 protein dimer, His Tag (Cat No. CSP-24038) at 2 μg/mL (100 μL/well) can bind anti-Rhesus macaque CD4 monoclonal antibody with half maximal effective concentration (EC50) range of 0.18-0.71 μg/mL (QC tested).

SDS-PAGE



MW: Molecular Weight marker reduced condition
NR: CD4 dimer under non-reduced condition

The migration range of the dimer protein with glycosylation under non-reduced condition is between 120 and 190 kDa on SDS PAGE.

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Expression Host
HEK293T

Protein Name
CD4

Purity
Greater than 90% dimer form as determined by SDS-PAGE under non-reducing condition

Alternate Name(s)
T-cell surface antigen T4/Leu-3

Protein Construct
CD4 dimer protein contains a CD4 extracellular domain (UniProt# P16003) fused with a proprietary cis-dimer motif followed by a His tag at the C-terminus. Expressed in HEK293T cell line.

Amino Acid Range
K26-P396

SDS-Page Molecular Weight
98 kDa. The migration range of the dimer protein with glycosylation under non-reduced condition is between 120 and 190 kDa on SDS PAGE.

Formulation
0.22µm filtered PBS, pH 7.4

Shipping Conditions
Frozen Dry Ice

Stability & Storage
-80^0C

Background

CD4 is Type 1 integral membrane glycoprotein protein on a T cell surface, also known as known as T-cell surface antigen T4/Leu-3. CD4 contains an extracellular domain, a transmembrane domain and a cytoplasmic domain. The extracellular domain has 4 immunoglobulin-like (Ig-like) domains: one Ig-like V-type domain and three Ig-like C2-type domains. The CD4 extracellular domain is responsible for MHC class-II antigen/T-cell receptor interaction and T cell activation. CD4 is also known as interleukin 16 receptor (IL16R). The IL16 cytokine binds CD4 to activate a downstream signaling cascade. CD4 is also the primary receptor for the human immunodeficiency virus (HIV) envelope glycoprotein gp120 to mediate HIV infection and entry into host T cells, as the underlying cause of acquired immune deficiency syndrome (AIDS). Rhesus macaque CD4 is a species-specific tool essential for preclinical studies, basic research, and translational research in cancer immunotherapy.