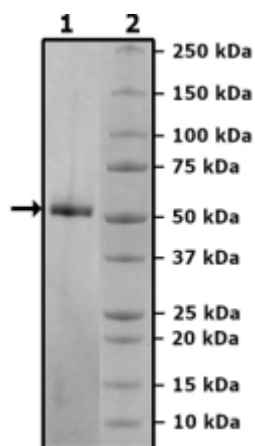


## Product Information

<b>Description:</b>	Human recombinant CD4, encompassing amino acids 26-396 which correspond to the extracellular domain. This construct contains a C-terminal Avi-Tag™ followed by an His-Tag (6xHis). This protein was affinity purified. HiP™ indicates a high purity protein (≥90% pure) and less than 10% aggregation as measured by gel filtration.
<b>Background:</b>	CD4 (cluster of differentiation 4) is part of the immunoglobulin superfamily, and is found in T-helper cells, monocytes, macrophages and dendritic cells. It is a co-receptor in the TCR (T-cell receptor), binding to MHC (major histocompatibility complex) class II molecules. CD4 binds to the tyrosine kinase Lck (lymphocyte-specific protein tyrosine kinase), which can phosphorylate the ITAM (immunoreceptor tyrosine activation motifs) domain of the CD3, activating CD3-related signaling. CD4 is a typical marker of T helper cells, and it has been linked to cancer, autoimmune diseases such as vitiligo and type I diabetes. In addition, HIV-1 uses CD4 as a cellular receptor to trigger viral envelope protein conformational changes that allow cell infection. Further studies into CD4 and potential strategies around it may benefit patients and CD4 related diseases.
<b>Species:</b>	Human
<b>Construct:</b>	CD4 (26-396-Avi-His)
<b>Concentration:</b>	0.82 mg/ml
<b>Expression System:</b>	HEK293
<b>Purity:</b>	≥90%
<b>Format:</b>	Aqueous buffer solution.
<b>Formulated In:</b>	8 mM phosphate, pH 7.4, 110 mM NaCl, 2.2 mM KCl, and 20% glycerol
<b>MW:</b>	45 kDa + glycans
<b>Glycosylation:</b>	This protein runs at a higher MW by SDS-PAGE due to glycosylation.
<b>Aggregation:</b>	<10%
<b>Genbank Accession:</b>	NM_000616.5
<b>Stability:</b>	At least 6 months at -80°C.
<b>Storage:</b>	-80°C
<b>Instructions for Use:</b>	Thaw on ice and gently mix prior to use. DO NOT VORTEX. Perform a quick spin before opening. Aliquot into small volumes and flash freeze for long term storage. Avoid multiple freeze/thaw cycles.

## Quality Control Data

### 4-20% SDS-PAGE Coomassie Staining



### Gel Filtration Curve

