CD4, Avi-Tag, His-Tag, Biotin-Labeled Recombinant

Catalog: 101869 Lot: 231011-1

Product Information

Description: Recombinant human CD4, encompassing amino acids 26-396. This construct contains a

C-terminal Avi-Tag[™] followed by an His-tag (6xHis). This protein was affinity purified.

Background: CD4 (cluster of differentiation 4) is part of the immunoglobulin superfamily, and it can

be found in T-helper cells, monocytes, macrophages, and dendritic cells. It is a coreceptor 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 phosphorylates the ITAM (immunoreceptor tyrosine activation motifs) domain of the CD3, activating CD3 related signaling. CD4 is a typical T cell 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 makes use of CD4 to trigger viral envelope protein conformational changes that allow cell infection. Ibalizumab, an anti-CD4 antibody, is currently used in the treatment of HIV, being considered a first-in-class medication. Further studies into CD4 and potential strategies around it may benefit

patients and CD4 related diseases.

Species: Human

Construct: CD4 (26-396-Avi-His)-(Biotin)

Concentration:0.62 mg/mlExpression System:HEK293Purity:≥90%

Format: Aqueous buffer solution.

Formulated In: 8 mM phosphate, pH 7.4, 110 mM NaCl, 2.2 mM KCl, and 20% glycerol

MW: 45 kDa + glycans

Glycosylation: This protein runs at a higher MW by SDS-PAGE due to glycosylation.

Genbank Accession: NM 000616.5

Label: This protein is enzymatically biotinylated using Avi-Tag™ technology. Biotinylation is

confirmed to be ≥90%.

Stability: At least 6 months at -80°C.

Storage: -80°C

Instructions for Use: 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.

Applications: Useful for avidin binding studies.



CD4, Avi-Tag, His-Tag, Biotin-Labeled Recombinant

Catalog: 101869 Lot: 231011-1

Quality Control Data

4-20% SDS-PAGE Coomassie Staining Biotin-Avidin Pulldown 1 2 3 250 kDa - 250 kDa 150 kDa - 150 kDa Beads - 100 kDa - 100 kDa - 75 kDa 2. Flow Thru – 75 kDa - 50 kDa 3. Control - 50 kDa - 37 kDa 4. Standards - 37 kDa 25 kDa - 25 kDa - 20 kDa * Avidin from beads. - 20 kDa - 15 kDa - 15 kDa - 10 kDa - 10 kDa