Human CTLA4 / CD152 Protein (His & Fc Tag)

Catalog Number: **11159-H03H**

Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

ALPS5; CD; CD152; CELIAC3; CTLA-4; GRD4; GSE; IDDM12; Cd152; Ctla-4; Ly-56

Protein Construction:

A DNA sequence encoding the human CTLA4 (NP_005205.2) extracellular domain (Met 1-Phe 162) was fused with the C-terminal polyhistidine-tagged Fc region of human IgG1 at the C-terminus.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 92 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Ala 37

Molecular Mass:

The recombinant human CTLA4/Fc is a disulfide-linked homodimer. The reduced monomer consists of 374 amino acids and has a predicted molecular mass of 41.6 kDa. As a result of glycosylation, the apparent molecular mass of rh CTLA4/Fc monomer is approximately 50-55 kDa in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

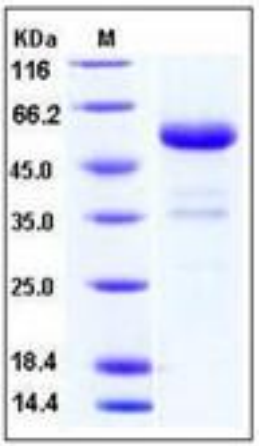
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Cytotoxic T-lymphocyte protein 4, also known as CTLA4 and CD152, is a single-pass type I membrane protein and a member of the immunoglobulin superfamily. It is the second member of the CD28 receptor family. The ligands or counterreceptors for these two proteins are the B7 family members, CD80 (B7-1) and CD86 (B7-2). CTLA4 transmits an inhibitory signal to T cells, whereas CD28 transmits a stimulatory signal. Intracellular CTLA4 is also found in regulatory T cells and may play an important role in their functions. CD152 or cytotoxic T lymphocyte antigen-4 (CTLA-4) is an essential receptor involved in the negative regulation of T cell activation. Because of its profound inhibitory role, CD152 has been considered a sound susceptible candidate in autoimmunity and a persuasive target for cancer immunotherapy. In particular, recent evidence suggests that CD152 is also important in the homeostasis and function of a population of suppressive cells, termed regulatory T cells (Treg).

References

1.Slavik JM, *et al.* (1999) CD28/CTLA-4 and CD80/CD86 families: signaling and function. Immunol Res. 19(1): 1-24.
2.Holmberg D, *et al.* (2005) CTLA-4 (CD152) and its involvement in autoimmune disease. Autoimmunity. 38(3): 225-33.
3.Chin LT, *et al.* (2008) Immune intervention with monoclonal antibodies targeting CD152 (CTLA-4) for autoimmune and malignant diseases. Chang Gung Med J. 31(1): 1-15.