Human CD86 / B7-2 Protein (His & Fc Tag)

Catalog Number: 10699-H03H

General Information

Gene Name Synonym:
B7-2, B7.2; B70; CD28LG2; LAB72

Protein Construction:
A DNA sequence encoding the extracellular domain (Met 1-His 239) of human B7-2 (NP_008820.2) pro-protein was fused with the C-terminal His-tagged Fc region of human IgG1 at the C-terminus.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Bio Activity:
1. Measured by its ability to bind human CD28 in a functional ELISA.
2. Measured by its ability to induce IL2 secretion by Jurkat human acute T cell leukemia cells. The ED50 for this effect is 1-5μg/mL.

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 °C.

Predicted N terminal: Leu 20

Molecular Mass:
The recombinant human B7-2/Fc is a disulfide-linked homodimeric protein. The reduced monomer consists of 467 amino acids and has a predicted molecular mass of 53.2 kDa. In SDS-PAGE, the apparent molecular mass of rh B7-2/Fc monomer is approximately 80-90 kDa due to glycosylation.

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°C to -80°C 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

CD86, also known as B-lymphocyte activation antigen B7-2 (referred to as B70), is a member of the cell surface immunoglobulin superfamily. B7-2 exists predominantly as a monomer on cell surfaces and interacts with two co-stimulatory receptors CD28 and cytotoxic T lymphocyte-associated antigen 4 (CTLA-4) expressed on T cells, and thus induces the signal pathways which regulate T cell activation and tolerance, cytokine production, and the generation of CTL. It is indicated that contacts between B and T helper cells mediated by CD86 encourage signals for the proliferation and IgG secretion of normal B cells and B cell lymphomas. Recent study has revealed that CD86 also promotes the generation of a mature APC repertoire and promotes APC function and survival. CD86 has an important role in chronic hemodialysis, allergic pulmonary inflammation, arthritis, and antiviral responses, and thus is regarded as a promising candidate for immune therapy.

References