Mouse CD80 / B7-1 Protein (Fc Tag)

General Information

Gene Name Synonym:
B71; Cd28; Ly-53; Ly53; MIC17; TSA1

Protein Construction:
A DNA sequence encoding the mouse CD80 (Q00609-1) extracellular domain (Met 1-Lys 245) was fused with the Fc region of human IgG1 at the C-terminus.

Source: Mouse

Expression Host: HEK293 Cells

QC Testing

Purity: > 90 % as determined by SDS-PAGE

Bio Activity:
1. Measured by its binding ability in a functional ELISA. 2. Immobilized human CTLA4 (cat: 11159-H08H) at 10 μg/mL (100 μl/well) can bind mouse CD80-Fc (cat: 50446-M02H). The EC50 of mouse CD80-Fc (cat: 50446-M02H) is 28 ng/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: Val 38

Molecular Mass:
The recombinant mouse CD80 consists of 449 amino acids and has a predicted molecular mass of 50.7 kDa.

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

The B-lymphocyte activation antigen B7-1 (referred to as B7), also known as CD80, is a member of cell surface immunoglobulin superfamily and is expressed on the surface of antigen-presenting cells including activated B cells, macrophages and dendritic cells. As costimulatory ligands, B7-1 which exists predominantly as dimer and the related protein B7-2, interact with the costimulatory receptors CD28 and cytotoxic T lymphocyte-associated antigen 4 (CTLA-4) expressed on T cells, and thus constitute one of the dominant pathways that regulate T cell activation and tolerance, cytokine production, and the generation of CTL. The B7/CD28/CTLA4 pathway has the ability to both positively and negatively regulate immune responses. CD80 is thus regarded as promising therapeutic targets for autoimmune diseases and various carcinomas.

References