Mouse CD80 / B7-1 / CD28LG Protein (His Tag)

Catalog Number: **50446-M08H**

Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

B71; Cd28l; Ly-53; Ly53; MIC17; TSA1

Protein Construction:

A DNA sequence encoding the mouse CD80 (Q00609-1) extracellular domain (Met 1-Lys 245) was expressed, with a polyhistidine tag at the C-terminus.

Source: Mouse

Expression Host: HEK293 Cells

QC Testing

Purity: > 97 % as determined by SDS-PAGE

Bio Activity:

Measured by its ability to bind recombinant mouse CD28 in a functional ELISA.

Endotoxin:

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

Predicted N terminal: Val 38

Molecular Mass:

The recombinant mouse CD80 consists of 219 amino acids and has a predicted molecular mass of 25.1 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rm CD80 is approximately 45-55 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

Stability & Storage:
Samples are stable for twelve months from date of receipt at -20℃ to -80℃.

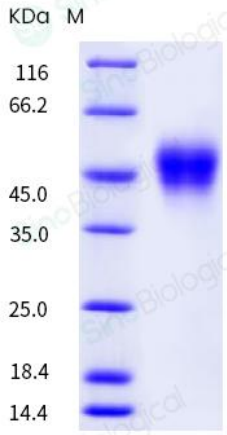
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

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

1.Greenfield EA, *et al.* (1998) CD28/B7 costimulation: a review. Crit Rev Immunol. 18(5): 389-418. 2.Zang X, *et al.* (2007) The B7 family and cancer therapy: costimulation and coinhibition. Clin Cancer Res. 13(18 Pt 1): 5271-9. 3.Mir MA, *et al.* (2008) Signaling through CD80: an approach for treating lymphomas. Expert Opin Ther Targets. 12(8): 969-79.