

# Cynomolgus / Rhesus CD80 / B7-1 Protein (His Tag)

Catalog Number: 90268-C08H



Sino Biological  
Biological Solution Specialist

## General Information

### Gene Name Synonym:

CD80

### Protein Construction:

A DNA sequence encoding the Cynomolgus / Rhesus CD80 (Met1-Asn242) was expressed with a polyhistidine tag at the C-terminus.

**Source:** Cynomolgus, Rhesus

**Expression Host:** HEK293 Cells

## QC Testing

**Purity:** > 95 % as determined by SDS-PAGE. > 95 % as determined by SEC-HPLC.

### Endotoxin:

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

**Predicted N terminal:** Val 35

### Molecular Mass:

The recombinant Cynomolgus / Rhesus CD80 consists 219 amino acids and predicts a molecular mass of 25.4 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

### Stability & Storage:

Samples are stable for twelve months from date of receipt at -20°C to -80°C.

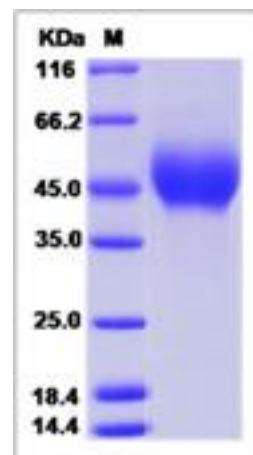
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**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

- 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.