

## Recombinant Cynomolgus/Rhesus macaque CD80 protein, His-tagged (HPLC-verified)

Cat. No. CD80-274C Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Cynomolgus/Rhesus macaque CD80 (HPLC-verified) protein (Val35-Asn242) protein was fused to His-tag at C-terminus and expressed in human 293 cells (HEK293).
<b>Species</b>	Cynomolgus/Rhesus macaque
<b>Source</b>	HEK293
<b>ProteinLength</b>	Val35-Asn242
<b>Description</b>	<p>B7-1 and B7-2, together with their receptors CD28 and CTLA4, constitute one of the dominant co-stimulatory pathways that regulate T and B cell responses. Although both CTLA4 and CD28 can bind to the same ligands, CTLA4 binds to B7-1 and B7-2 with a 20-100 fold higher affinity than CD28 and is involved in the downregulation of the immune response.</p> <p>B-lymphocyte activation antigen B7-1 (referred to as B7) also known as cluster of Differentiation 80 (CD80), is a member of cell surface immunoglobulin superfamily and is expressed on activated B cells, activated T cells, macrophages and dendritic cells. It is the ligand for two different proteins on the T cell surface: CD28 (for autoregulation and intercellular association) and CTLA-4 (for attenuation of regulation and cellular disassociation). CD80 works in tandem with CD86 to prime T cells. CD80 plays a role in induction of innate immune responses by activating NF-κB-signaling pathway in macrophages. CD80 is thus regarded as promising therapeutic targets for</p>

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autoimmune diseases and various carcinomas.

**Predicted N Terminal** Val35

**Form** Lyophilized from 0.22 µm filtered solution in PBS, pH7.4, 10% trehalose.

**Molecular Mass** The protein has a calculated MW of 25.8 kDa. The protein migrates as 43-55 kDa under reducing (R) condition (SDS-PAGE) due to different glycosylation.

**Endotoxin** Less than 1.0 EU per µg by the LAL method.

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

**Storage**

For long term storage, the product should be stored at lyophilized state at -20 centigrade or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- 20 to -70 centigrade for 12 months in lyophilized state;
- 70 centigrade for 3 months under sterile conditions after reconstitution.

**Reconstitution** It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 ug/ul. Centrifuge the vial at 4°C before opening to recover the entire contents.

## GENE INFORMATION

**Gene Name** CD80

**Official Symbol** CD80

**Synonyms** CD80; CD80 antigen; T-lymphocyte activation antigen CD80; B7 protein; activation B7-1 antigen; B71; Ly53; TSA1; Cd28l; Ly-53; MIC17

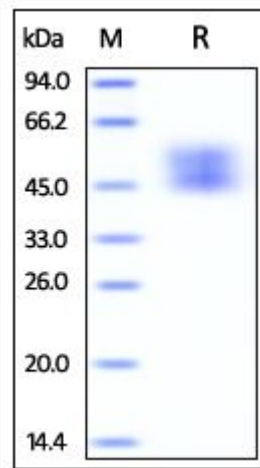
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<b>Gene ID</b>	102140078
<b>mRNA Refseq</b>	XM_015446388.1
<b>Protein Refseq</b>	XP_015301874.1
<b>UniProt ID</b>	F7HRG1

**SDS-PAGE of CD80-274C**



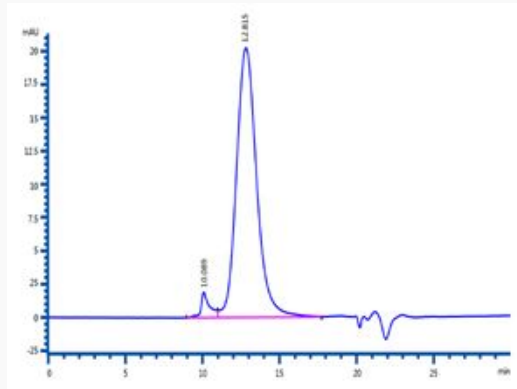
Cynomolgus / Rhesus macaque B7-1, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

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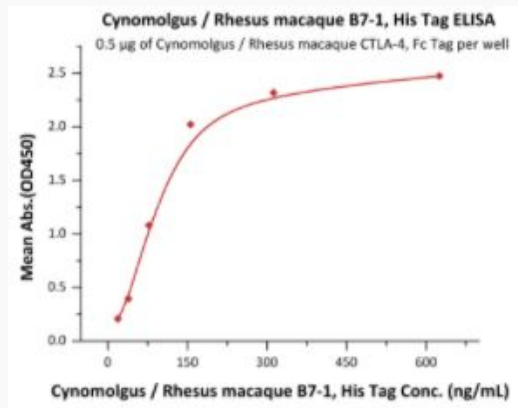
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**SEC-HPLC of CD80-274C**



The purity of Cynomolgus / Rhesus macaque B7-1, His Tag (HPLC-verified) was more than 90% as determined by SEC-HPLC.

**Bioactivity-ELISA**



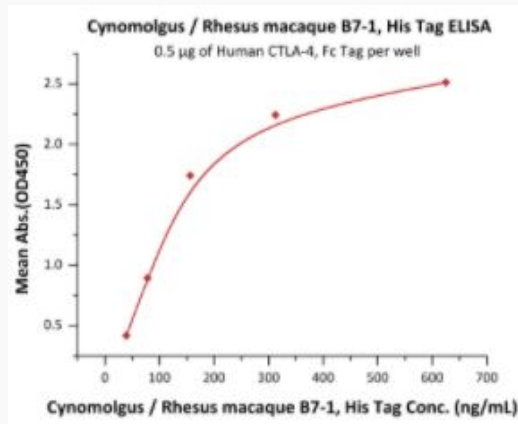
Immobilized Cynomolgus / Rhesus macaque CTLA-4, Fc Tag at 5 µg/mL (100 µL/well) can bind Cynomolgus / Rhesus macaque B7-1, His Tag (HPLC-verified) with a linear range of 10-156 ng/mL (QC tested).

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**Bioactivity-ELISA of  
CD80-274C**



Immobilized Human CTLA-4, Fc Tag at 5 µg/mL (100 µL/well) can bind Cynomolgus / Rhesus macaque B7-1, His Tag (HPLC-verified) with a linear range of 10-156 ng/mL (Routinely tested).

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