

## Datasheet for ABIN2180839

# CD80 Protein (CD80) (AA 35-242) (His tag)





#### Overview

| Quantity:                     | 100 μg                                      |
|-------------------------------|---|
| Target:                       | CD80  |
| Protein Characteristics:      | AA 35-242                                   |
| Origin:                       | Cynomolgus, Rhesus Monkey                   |
| Source:                       | HEK-293 Cells                               |
| Protein Type:                 | Recombinant                                 |
| Purification tag / Conjugate: | This CD80 protein is labelled with His tag. |
|                               |   |
| Product Details               |   |

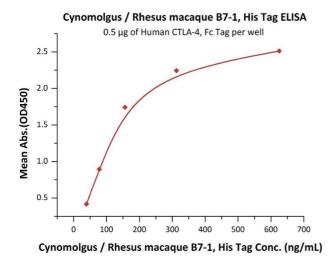
| Sequence:        | AA 35-242  |
|------------------|--|
| Characteristics: | This protein carries a polyhistidine tag at the C-terminus. The protein has a calculated MW of 25.8 kDa. The protein migrates as 43-55 kDa under reducing (R) condition (SDS-PAGE) due to different glycosylation. |
| Purity:          | >95 % as determined by SDS-PAGE.   |
| Sterility:       | 0.22 µm filtered   |
| Endotoxin Level: | Less than 1.0 EU per µg by the LAL method.   |
| Grade:           | HPLC verified  |

## Target Details

| CD80 |      |      |
|------|------|------|
|      | CD80 | CD80 |

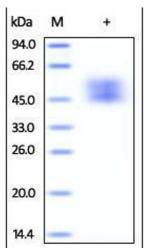
## **Target Details**

| Alternative Name:   | B7-1 (CD80 Products)   |
|---------------------|--|
| Background:         | B7-1 and B7-2, together with their receptors CD28 and CTLA-4, constitute one of the dominant       |
|                     | co-stimulatory pathways that regulate T- and B-cell responses. Although both CTLA-4 and CD28       |
|                     | can bind to the same ligands, CTLA-4 binds to B7-1 and B7-2 with a 20 - 100 fold higher affinity   |
|                     | than CD28 and is involved in the down-regulation of the immune response. 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-кВ-      |
|                     | signaling pathway in macrophages. CD80 is thus regarded as promising therapeutic targets for       |
|                     | autoimmune diseases and various carcinomas.  |
| Molecular Weight:   | 25.8 kDa   |
| UniProt:            | G7NXN7   |
| Pathways:           | TCR Signaling, Fc-epsilon Receptor Signaling Pathway, EGFR Signaling Pathway, Neurotrophin         |
|                     | Signaling Pathway, Positive Regulation of Immune Effector Process, Cancer Immune                   |
|                     | Checkpoints  |
| Application Details |  |
| Restrictions:       | For Research Use only  |
| Handling            |  |
| Format:             | Lyophilized  |
| Buffer:             | PBS, pH 7.4  |
| Handling Advice:    | Please avoid repeated freeze-thaw cycles.  |
| Storage:            | -20 °C   |
| Storage Comment:    | No activity loss was observed after storage at: In lyophilized state for 1 year (4 °C), After      |
|                     | reconstitution under sterile conditions for 3 months (-70 °C).                                     |



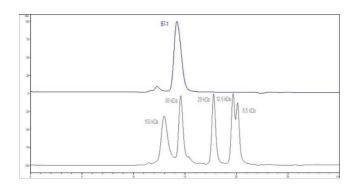
#### **ELISA**

**Image 1.** Immobilized Human CTLA-4, Fc Tag (ABIN2180932,ABIN2180931) at  $5 \,\mu g/mL$  (100  $\mu L/well$ ) can bind Cynomolgus / Rhesus macaque B7-1, His Tag (Hied) (ABIN2180840,ABIN2180839) with a linear range of 10-156 ng/mL (Routinely tested).



#### **SDS-PAGE**

**Image 2.** Cynomolgus B7-1, His Tag (HPLC-verified) on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.



### **High Pressure Liquid Chromatography**

Image 3. The purity of Cynomolgus / Rhesus macaque B7-1, His Tag (Hied) (ABIN2180840,ABIN2180839) was more than 90% as determined by .

Please check the product details page for more images. Overall 4 images are available for ABIN2180839.