# **PRODUCT INFORMATION**

**Expression system** Baculovirus

**Domain** 37-246aa

**UniProt No.** Q00609

NCBI Accession No. NP\_033985

## **Alternative Names**

T-lymphocyte activation antigen CD80, Cd80, Cd28l, Ly-53, Ly53, MIC17, TSA1, Activation B7-1 antigen, B7

# **PRODUCT SPECIFICATION**

Molecular Weight 24.7 kDa (216aa)

**Concentration** 0.25mg/ml (determined by absorbance at 280nm)

## Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

## Purity

> 95% by SDS-PAGE

**Endotoxin level** < 1 EU per 1ug of protein (determined by LAL method)

## **Biological Activity**

Measured by its binding ability in a functional ELISA with Mouse CTLA4 (CAT# ATGP4046).

**Tag** His-Tag

Application SDS-PAGE, Bioactivity

# **Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

# BACKGROUND

# Description

Cd80, also known as T-lymphocyte activation antigen 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. It is the ligand for two different proteins on the T cell surface: Cd28 (for autoregulation and intercellular association) and Ctla4 (for attenuation of regulation and cellular disassociation). This protein also plays a role in induction of innate immune responses by activating NF-KB-signaling pathway in macrophages. It is thus regarded as promising therapeutic targets for autoimmune diseases and various carcinomas. Recombinant mouse Cd80, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

### Amino acid Sequence

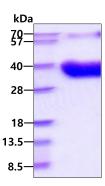
DVDEQLSKSV KDKVLLPCRY NSPHEDESED RIYWQKHDKV VLSVIAGKLK VWPEYKNRTL YDNTTYSLII LGLVLSDRGT YSCVVQKKER GTYEVKHLAL VKLSIKADFS TPNITESGNP SADTKRITCF ASGGFPKPRF SWLENGRELP GINTTISQDP ESELYTISSQ LDFNTTRNHT IKCLIKYGDA HVSEDFTWEK PPEDPPDSKN <HHHHHH>

### **General References**

Peach R., et al. (1995) J. Biol. Chem. 270: 21181-21187. Suvas S., et al. (2002) J. Biol. Chem. 277:7766-7775.

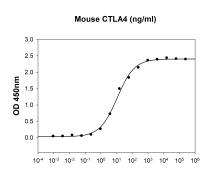
## DATA

#### **SDS-PAGE**



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

## **Biological Activity**



Mouse CD80 is coated at 2 ug/ml (100 ul/well) can bind Mouse CTLA4 (CAT# ATGP4046) in a Functional ELISA assay.