

# Recombinant human B7-1/CD80 protein

Catalog Number: ATGP3663

## PRODUCT INFORMATION

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### Expression system

Baculovirus

### Domain

35-242aa

### UniProt No.

P33681

### NCBI Accession No.

NP\_005182

### Alternative Names

Activation B7-1 antigen, B7, B7.1, B7-1, BB1, CD28LG, CD28LG1, CD80, CTLA-4 counter-receptor B7.1, FcalphaRI, LAB7, T-lymphocyte activation antigen CD80

## PRODUCT SPECIFICATION

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### Molecular Weight

24.9 kDa (216aa)

### Concentration

0.5mg/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 Human CD28 (CAT# ATGP3603)

### 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

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# Recombinant human B7-1/CD80 protein

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## Description

CD80, also known as T-lymphocyte activation antigen CD80, is a member of cell surface immunoglobulin superfamily. This protein can bind to either human or mouse CD28 and CTLA-4. It is expressed on activated B cells, activated T cells, and macrophages. The B7/CD28/CTLA4 pathway has the ability to both positively and negatively regulate immune responses. Therefore, it is considered a promising therapeutic target for autoimmune diseases and various carcinomas. Recombinant human CD80, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

## Amino acid Sequence

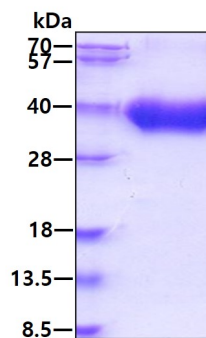
VIHVTKEVKE VATLSCGHNV SVEELAQTRI YWQKEKKMVL TMMSGDMNIW PEYKNRTIFD ITNNLSIVIL ALRPSDEGTY ECVVLKYEKD AFKREHLAEV TLSVKADFPT PSISDFEIPT SNIRRIICST SGGFPEPHLS WLENGEELNA INTTVSQDPE TELYAVSSKL DFNMTTNHSF MCLIKYGHRLR VNQTFNWNTT KQEHFPDN<LE HHHHHH>

## General References

Zang X., et al. (2007) Clin Cancer Res. 13:5271-5279.  
 Kakoulidou M., et al. (2007) Scand. J. Immunol. 66:529-537.

## DATA

### SDS-PAGE



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

### Biological Activity

Human CD80 is coated at 1ug/ml (100 ul/well) can bind CD28 (CAT# ATGP3603) in a Functional ELISA assay.

