

Active Recombinant Human CD80, Fc-tagged, Biotinylated

Cat. No. CD80-582H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	The recombinant human CD80-Fc fusion protein is expressed as a 437 amino acid protein consisting of Val35 - Asn242 region of CD80 (UniProt accession #P33681) and a C-terminal Fc fusion from human IgG1, which exists as a dimer under non-reducing condition.
Species	Human
Source	Human Cells
ProteinLength	35-242 a.a.
Form	Supplied at 0.5 mg/ml in sterile PBS pH7.4 (carrier free & preservative free). The purified recombinant protein was labeled with Biotin (3-5 Biotin per molecule).
Bio-activity	Binds to human CD28, CTLA4 and PD-L1 by ELISA using immobilized CD80 protein. Binds to human and mouse PD-L1 in a functional ELISA. Induces IL-2 secretion by Jurkat human acute T cell leukemia cells with an ED50 of 0.05 - 0.2 µg/mL in the presence of PHA.
Molecular Mass	Calculated molecular mass 49.5 kDa; estimated by SDS-PAGE under reducing condition 70-75 kDa probably due to glycosylation.
AA Sequence	VIHVTKEVKEVATLSCGHNVSVEELAQTRIYWQKEKKMVLTMMSGDMNIWPEYKNR TIFDITNNLSIVILALRP SDEGTYESVVLKYEKDAFKREHLAEVTLVKADFPPTPSISDF EIPTSNIRRIICSTSGGFPEPHLSWLENGEEL NAINTTVSQDPETELYAVSSKLDFNM

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TTNHSFMCLIKYGHLRVNQTFNWNTTKQEHFPDNGSTGTHTCPPCPAP ELLGGPS
VFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQ
YNSTYRVVSVL TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLTP
PSREEMTKNQVSLTCLVKGFYPSDIAVE WESNGQPENNYKTTTPVLDSGDGSFFLYS
KLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Endotoxin <0.1 eu per 1 µg of purified recombinant protein determined by the

Purity >95% judged by SDS-PAGE under reducing condition

Storage The product is shipped at 4°C. Upon receipt, centrifuge the product briefly before opening the vial. It is recommended to store small aliquots at the temperature below –20°C for long-term storage and the product is stable for 3 months. The undiluted protein can be stored at 4°C for no more than 2 weeks. Avoid repeated freeze-thaw cycles.

Conjugation Biotin

GENE INFORMATION

Gene Name CD80 CD80 molecule [Homo sapiens]

Official Symbol CD80

Synonyms CD80; CD80 molecule; CD28LG, CD28LG1, CD80 antigen (CD28 antigen ligand 1, B7 1 antigen) , CD80 molecule; T-lymphocyte activation antigen CD80; B lymphocyte activation antigen B7; B7 1; B7.1; activation B7-1 antigen; costimulatory factor CD80; CTLA-4 counter-receptor B7.1; B-lymphocyte activation antigen B7; costimulatory molecule variant IgV-CD80; CD80 antigen (CD28 antigen ligand 1, B7-1 antigen); B7; BB1; B7-1; LAB7; CD28LG; CD28LG1;

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Gene ID	941
mRNA Refseq	NM_005191
Protein Refseq	NP_005182
MIM	112203
UniProt ID	P33681
Chromosome Location	3q13.3-q21
Pathway	Adaptive Immune System, organism-specific biosystem; Allograft rejection, organism-specific biosystem; Allograft rejection, conserved biosystem; Autoimmune thyroid disease, organism-specific biosystem; Autoimmune thyroid disease, conserved biosystem; CD28 co-stimulation, organism-specific biosystem; CD28 dependent PI3K/Akt signaling, organism-specific biosystem;
Function	coreceptor activity; protein binding; receptor activity;