

# Recombinant Monkey CD80 Protein, hFc-tagged, Alexa Fluor 488 conjugated

**Cat. No.** CD80-137CAF488    **Lot. No.** (See product label)

## SPECIFICATION

**Product Overview**      Alexa Fluor 488 conjugated recombinant Cynomolgus/Rhesus macaque CD80 (Val35-Asn242) protein was fused to human IgG1 Fc tag at C-terminus and expressed in human 293 cells (HEK293).

**Species**      Monkey

**Source**      HEK293

**ProteinLength**      Val35-Asn242

**Description**

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.

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

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	autoimmune diseases and various carcinomas.
<b>Form</b>	Lyophilized
<b>Molecular Mass</b>	The protein has a calculated MW of 50.5 kDa. The protein migrates as 60-90 kDa under reducing (R) condition (SDS-PAGE) due to different glycosylation.
<b>N-terminal Sequence Analysis</b>	Val 35
<b>Endotoxin</b>	< 1.0 EU/ µg by the LAL method.
<b>Purity</b>	> 95 % as determined by SDS-PAGE
<b>Characteristic</b>	Disulfide-linked homodimer Labeled with Alexa Fluor 488 via amines Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
<b>Storage</b>	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.
<b>Storage Buffer</b>	Lyophilized from 0.22 µm filtered solution in Tris with Glycine, Arginine and NaCl, pH7.5, 10% trehalose.
<b>Reconstitution</b>	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 µg/µL. Centrifuge the vial at 4 centigrade before opening to recover the entire

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contents.

**Conjugation** Alexa Fluor 488**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**Gene ID** 102140078**mRNA Refseq** XM\_015446388**Protein Refseq** XP\_015301874**UniProt ID** F7HRG1 Tel: 1-631-559-9269 1-516-512-3133 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127 45-1 Ramsey Road, Shirley, NY 11967, USA