

Recombinant Mouse Cd80 Protein, hFc-tagged, Alexa Fluor 647 conjugated

Cat. No. Cd80-6898MAF647 **Lot. No.** (See product label)

SPECIFICATION

Product Overview Alexa Fluor 647 conjugated recombinant Mouse Cd80 (Val38-Lys245) protein was fused to human IgG1 Fc tag at C-terminus and expressed in human 293 cells (HEK293).

Species Mouse

Source HEK293

ProteinLength Val38-Lys245

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.
Form	Lyophilized
Molecular Mass	The protein has a calculated MW of 50.3 kDa. The protein migrates as 66-90 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.
N-terminal Sequence Analysis	Val 38
Endotoxin	< 1.0 EU/ µg by the LAL method.
Purity	> 95 % as determined by SDS-PAGE
Characteristic	Disulfide-linked homodimer Labeled with Alexa Fluor 647 via amines Excitation = 650 nm Emission = 668 nm
Storage	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.
Storage Buffer	Lyophilized from 0.22 µm filtered solution in Tris with Glycine, Arginine and NaCl, pH7.5, 10% trehalose.
Reconstitution	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 647**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; Cd28I; Ly-53; MIC17**Gene ID** 12519**mRNA Refseq** NM_009855**Protein Refseq** NP_033985**UniProt ID** Q00609 Tel: 1-631-559-9269 1-516-512-3133 Email: info@creative-biomart.com  Fax: 1-631-938-8127 45-1 Ramsey Road, Shirley, NY 11967, USA