Recombinant Mouse Cd80 protein, Fc-tagged

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

SPECIFICATION

Product Overview	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 Bcell responses. Although both CTLA4 and CD28 can bind to the same ligands, CTLA4 binds to B71 and B72 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 autoimmune diseases and various carcinomas.

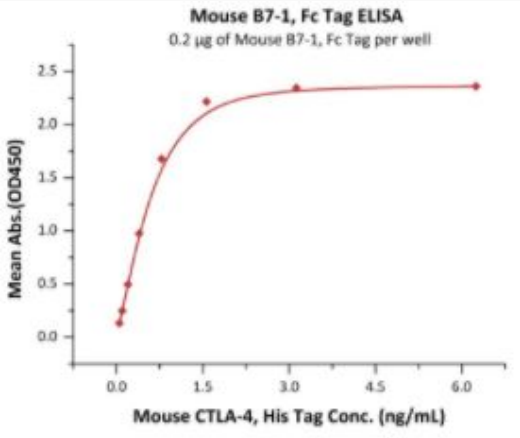
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Predicted N Terminal	Val38
Form	Lyophilized from 0.22 μm filtered solution in Tris with Glycine, Arginine and NaCl, pH7.5, 10% trehalose.
Molecular Mass	The protein has a calculated MW of 50.3 kDa. The protein migrates as 66-90 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.
Endotoxin	Less than 1.0 EU per μg by the LAL method.
Purity	>95% as determined by SDS-PAGE.
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.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 ug/ul. Centrifuge the vial at 4℃ before opening to recover the entire contents.

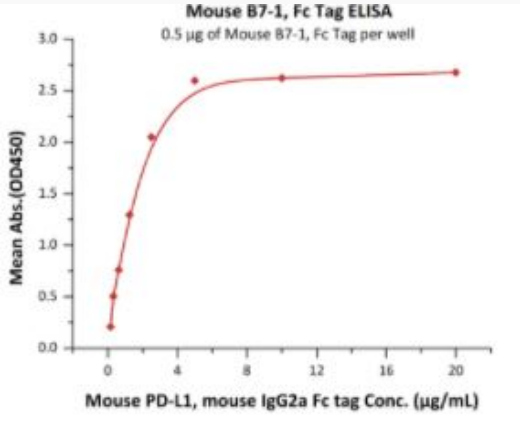
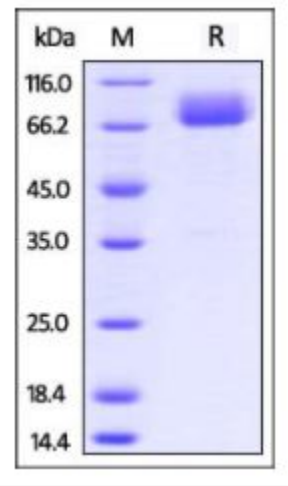
GENE INFORMATION

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

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Gene ID	12519
mRNA Refseq	NM_009855
Protein Refseq	NP_033985
UniProt ID	Q00609
Bioactivity-ELISA of Cd80-6898M	 Immobilized Mouse B7-1, Fc Tag at 2 μg/mL (100 μL/well) can bind Mouse CTLA-4, His Tag with a linear range of 0.05-0.8 ng/mL (QC tested).

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Bioactivity-ELISA	 Immobilized Mouse B7-1, Fc Tag at 5 μg/mL (100 μL/well) can bind Mouse PD-L1, mouse IgG2a Fc tag, low endotoxin with a linear range of 0.16-2.5 μg/mL (Routinely tested).
SDS-PAGE of Cd80-6898M	 Mouse B7-1, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

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