## **Elabscience**®

### Recombinant Mouse CD80/B7-1 Protein(His Tag)

#### Catalog Number: PDMM100098

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Species	Mouse
Source	Mammalian-derived Mouse CD80/B7-1 protein Val38-Asn246, with an C-terminal His
Calculated MW	22.8 kDa
Observed MW	40-60 kDa
Accession	Q00609-1
Bio-activity	Not validated for activity
Properties	
Purity	> 90% as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU/mg of the protein as determined by the LAL method
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80
	°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at $< -20$ °C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with 5% Trehalose and 5%
	Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of
	0.5 mg/mL. Concentration is measured by UV-Vis.

Data



SDS-PAGE analysis of Mouse CD80/B7-1 proteins, 2 µg/lane of Recombinant Mouse CD80/B7-1 proteins was resolved with an SDS-PAGE under reducing conditions, showing bands at 22.8KD

#### Background

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The B-lymphocyte activation antigen B7-1 (referred to as B7), also known as CD80, is a member of cell surface immunoglobulin superfamily and is expressed on the surface of antigen-presenting cells including activated B cells, macrophages and dendritic cells. As costimulatory ligands, B7-1 which exists predominantly as dimer and the related protein B7-2, interact with an the costimulatory receptors CD28 and cytotoxic T lymphocyte-associated antigen 4 (CTL A-4) expressed on T cells, and thus constitute one of the dominant pathways that regulate T cell activation and tolerance, cytokine production, and the generation of CTL. The B7/CD28/CTLA4 pathway has the ability to both positively and negatively regulate immune responses. CD80 is thus regarded as promising therapeutic targets for autoimmune diseases and various carcinomas.