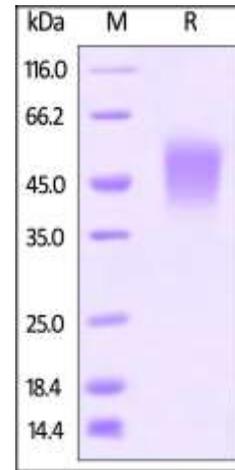
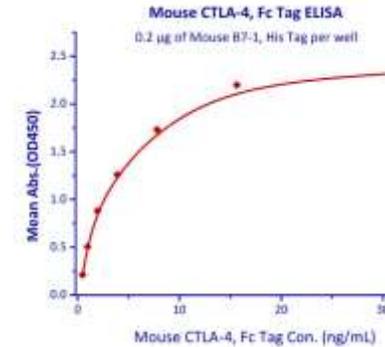


## Human CellExp™ B7-1 / CD80, mouse recombinant

<b>CATALOG NO:</b>	P1075-10      10 µg P1075-50      50 µg
<b>ALTERNATE NAMES:</b>	CD80, B7, B7-1, B7.1, BB1, CD28LG, CD28LG1, LAB7
<b>SOURCE:</b>	HEK 293 cells (Val 38 - Lys 245)
<b>PURITY:</b>	> 95% by SDS – PAGE
<b>MOL. WEIGHT:</b>	This protein is fused with polyhistidine tag tag at C terminus and the protein has a calculated MW of 25.6 kDa. The predicted N-terminus is Val 38. The protein migrates as 40-55 kDa in SDS-PAGE under reducing conditions due to glycosylation.
<b>ENDOTOXIN LEVEL:</b>	< 1.0 EU per 1µg of protein (determined by LAL method)
<b>FORM:</b>	Lyophilized
<b>FORMULATION:</b>	Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Generally Mannitol or Trehalose is added as a protectant before lyophilization.
<b>RECONSTITUTION &amp; STORAGE:</b>	Store at -20°C. After reconstitution, aliquot and store at -80°C and use within 3 months. Avoid repeated freezing and thawing cycles. Centrifuge the vial prior to opening. Reconstitute in sterile deionized water to a concentration of 50 µg/ml. Solubilize for 30 to 60 minutes at room temperature with occasional gentle mixing. Carrier protein (0.1% (W/V) HSA or BSA) is recommended for further dilution and long term storage. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -80°C.
<b>DESCRIPTION:</b>	B7-1 and B7-2, together with their receptors CD28 and CTLA-4, constitute one of the dominant co-stimulatory pathways that regulate T- and B-cell responses. Although both CTLA-4 and CD28 can bind to the same ligands, CTLA-4 binds to B7-1 and B7-2 with a 20 - 100 fold higher affinity than CD28 and is involved in the down-regulation 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.



The purity of Mouse B7-1 / CD80 was determined by SDS-PAGE under reducing (R) condition and staining overnight with Coomassie Blue.



Immobilized Mouse B7-1, His Tag at 2 µg/mL (100 µL/well) can bind Mouse CTLA-4, Fc Tag with a linear range of 0.12-0.5 ng/mL

**BIOACTIVITY:** Measured by its binding ability in a functional ELISA. Immobilized Mouse B7-1, His Tag at 2µg/ml (100 µL/well) can bind Mouse CTLA-4, Fc Tag with a linear range of 0.12-0.5 ng/ml.

### RELATED PRODUCT:

- Human CellExp™ CD80, human recombinant (Cat. No. 7383-10, -50)
- Human CellExp™ CD155, human recombinant (Cat. No. 7462-10, -50)
- Human CellExp™ CD160/BY55, human recombinant (Cat. No. 7386-10, -50)
- Human CellExp™ CD166/ ALCAM, human recombinant (Cat. No. 7437-10, -50)
- Human CellExp™ CD172A / SIRP, human recombinant (Cat. No. 7506-10, -50)
- Human CellExp™ CD33 / SIGLEC-3, human recombinant (Cat. No. 7370-10, -50)
- Human CellExp™ CD47, human recombinant (Cat. No. 7385-10, -50)
- Human CellExp™ CD55/DAF, human recombinant (Cat. No. 7432-10, -50)
- Human CellExp™ CD58 /LFA-3, human recombinant (Cat. No. 7427-10, -50)
- Human CellExp™ CD62E/E-Selectin, human recombinant (Cat. No. 7434-20, -100)
- Human CellExp™ CD71 / TFRC / TFR, human recombinant (Cat. No. 7279-10, -50)
- Human CellExp™ CD273, human recombinant (Cat. No. 7369-10, -50)
- Human CellExp™ CD36, human recombinant (Cat. No. 7371-10, -50)
- Human CellExp™ CD87, human recombinant (Cat. No. 7372-20, -100)

**FOR RESEARCH USE ONLY! Not to be used on humans.**