

# Human CellExp™ CD80, human recombinant

**CATALOG #:** 7383-10 10 µg  
7383-50 50 µg

**ALTERNATE NAMES:** CD80, B7, B7-1, B7.1, BB1, CD28LG, CD28LG1, LAB7

**SOURCE:** HEK 293 cells (Val 35 –Asn 242)

**PURITY:** ≥ 95% by SDS-PAGE gel

**MOL. WEIGHT:** This protein is fused with 6×His tag at the C-terminus, has a calculated MW of 24.7 kDa. The predicted N-terminus is Val 35. DTT-reduced Protein migrates as 45-75 kDa due to different glycosylation.

**ENDOTOXIN LEVEL:** <1 EU/µg by LAL method

**FORM:** Lyophilized

**FORMULATION:** Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Generally 5-8% Mannitol or trehalose is added as a protectant before lyophilization.

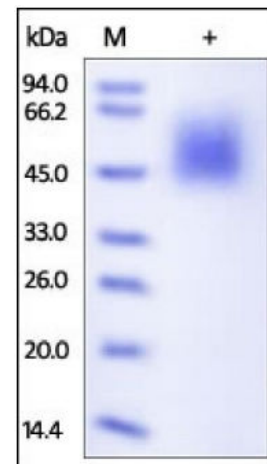
**STORAGE CONDITIONS:** Store at -20°C. After reconstitution, aliquot and store at -20°C and use within 3 months. Avoid repeated freezing and thawing cycles.

**RECONSTITUTION:** Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 µg/ml. 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 -20°C.

**DESCRIPTION:** 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. CD80 is thus regarded as promising therapeutic targets for autoimmune diseases and various carcinomas.

**BIOLOGICAL ACTIVITY:** Measured by its ability to induce IL2 secretion by Jurkat human acute T cell leukemia cells. The ED<sub>50</sub> for this effect is typically 0.01 - 0.1 µg/mL in the presence of phytohaemagglutinin.



Human recombinant CD80

**RELATED PRODUCTS:**

- Human CellExp™ CD223, human recombinant (Cat. No. 7278-10, -50)
- Human CellExp™ CD71, human recombinant (Cat. No. 7279-10, -50)
- Human CellExp™ CD273, human recombinant (Cat. No. 7369-10, -50)
- Human CellExp™ CD33, human recombinant (Cat. No. 7370-10, -50)
- Human CellExp™ CD36, human recombinant (Cat. No. 7371-10, -50)
- Human CellExp™ CD87, human recombinant (Cat. No. 7372-20, -100)
- Human CellExp™ CD360, human recombinant (Cat. No. 7373-20, -100)
- Human CellExp™ CD244, human recombinant (Cat. No. 7374-10, -50)
- Human CellExp™ CD304, human recombinant (Cat. No. 7375-10)
- Human CellExp™ CD319, human recombinant (Cat. No. 7376-10, -50)
- Human CellExp™ CD306, human recombinant (Cat. No. 7377-10, -50)
- Human CellExp™ CD84, human recombinant (Cat. No. 7378-10, -50)
- Human CellExp™ CD111, human recombinant (Cat. No. 7379-10, -50)
- Human CellExp™ CD48, human recombinant (Cat. No. 7380-10, -50)

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