



# Recombinant Protein Technical Manual

**Recombinant Mouse CD80/B7 Protein (His Tag)(Active)**  
RPES2669

## Product Data:

**Product SKU:** RPES2669

**Size:** 100µg

**Species:** Mouse

**Expression host:** HEK293 Cells

**Uniprot:** Q00609

## Protein Information:

**Molecular Mass:** 25.1 kDa

**AP Molecular Mass:**

**Tag:** C-His

**Bio-activity:** Measured by its ability to bind recombinant mouse CD28 in a functional ELISA.

**Purity:** > 97 % as determined by SDS-PAGE

**Endotoxin:** < 1.0 EU per µg of the protein as determined by the LAL method.

**Storage:** 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 sterile PBS, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:** Functional ELISA

**Synonyms:** T-lymphocyte activation antigen CD80; Activation B7 antigen; B7; CD80;Cd28|;Ly-53;Ly53;MIC17;TSA1

## Immunogen Information:

**Sequence:** Met 1-Lys 245

## Background:

The B-lymphocyte activation antigen B7 (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 which exists predominantly as dimer and the related protein B7-2, interact with the costimulatory receptors CD28 and cytotoxic T lymphocyte-associated antigen 4 (CTLA-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.