



# Recombinant Protein Technical Manual

## Recombinant Rabbit B7/CD80 Protein (His Tag)

RPES3662

### Product Data:

**Product SKU:** RPES3662

**Size:** 10µg

**Species:** Rabbit

**Expression host:** Human Cells

**Uniprot:** P42070

### Protein Information:

**Molecular Mass:** 24.5 kDa

**AP Molecular Mass:** 30-50 kDa

**Tag:** C-His

**Bio-activity:**

**Purity:** > 95% as determined by reducing SDS-PAGE.

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

**Storage:** Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°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 µm filtered solution of PBS, pH7.4.

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

**Application:**

**Synonyms:** T-lymphocyte activation antigen CD80; Activation B7 antigen; B7; CD80

## Immunogen Information:

**Sequence:** Gly33-Gln241

## Background:

Cluster of Differentiation 80, also called B7, is a member of cell surface immunoglobulin superfamily which plays key, yet distinct roles in the activation of T cells. B7/CD80 and B7-2/CD86, together with their receptors CD28 and CTLA4, constitute one of the dominant co-stimulatory pathways that regulate T- and B- cell responses. CD80 is mostly expressed on the surface of antigen-presenting cells including activated B cells, macrophages and dendritic cells. Although both CTLA-4 and CD28 can bind to the same ligands, CTLA-4 binds to B7 and B7-2 with a 2000 fold higher affinity than CD28 and is involved in the down-regulation of the immune response.