

## Recombinant Protein Technical Manual

# Recombinant Mouse CD27/TNFRSF7 Protein (His & Fc Tag)(Active) RPES4671

#### Product Data:

**Product SKU:** RPES4671 **Size:** 50μg

Species: Mouse Expression host: HEK293 Cells

**Uniprot: NP 001028298.1** 

#### **Protein Information:**

Molecular Mass: 46.2 kDa

AP Molecular Mass: 60-65 kDa

**Tag:** C-His-Fc

**Bio-activity:** Measured by its binding ability in a functional ELISA. Immobilized recombinant

mouse CD27 at 2 μg/ml (100 μl/well) can bind biotinylated human CD70 with a

linear range of 0.392.5 ng/ml.

**Purity:** > 94 % as determined by SDS-PAGE

**Endotoxin:**  $< 1.0 \text{ EU per } \mu \text{g}$  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:** CD27 antigen; CD27L receptor; T-cell activation antigen CD27; Tumor necrosis

factor receptor superfamily member 7;S152;Tnfrsf7;Tp55

## Immunogen Information:

Sequence: Met 1-Arg 182

## Background:

CD27, also known as TNFRSF7, is a member of the TNF-receptor superfamily limited to cells of the lymphoid lineage, and exists as both a dimeric glycoprotein on the cell surface and as a soluble protein in serum. As a type I transmembrane glycoprotein of about 55 kDa existing as disulfide-linked homodimer, CD27 has been shown to play roles in lymphoid proliferation, differentiation, and apoptosis. It has important role in generation of T cell immunity, and is an apparently robust marker for normal memory B cells. It is a T and B cell co-stimulatory molecule, the activity of CD27 is governed by its TNF-like ligand CD70 on lymphocytes and dendritic cells. The CD27-CD70 interaction is required for Th1 generation responses to differentiation signals and long-term maintenance of T cell immunity, and meanwhile, plays a key role in regulating B-cell differentiation, activation and immunoglobulin synthesis.