

## Recombinant Protein Technical Manual

# Recombinant Human CD86/B7-2 Protein (aa 1-239, His Tag) (Active)

RPES3342

**Product SKU: RPES3342 Size:** 100μg

**Expression host: HEK293 Cells Species**: Human

Uniprot: NP 008820.2

**Molecular Mass:** 26.2 kDa

AP Molecular Mass: 55-60 kDa

Tag: C-His

**Bio-activity:** Measured by its binding ability in a functional ELISA. Immobilized human CD86 at

20 μg/ml (100 μl/well) can bind human CD28 with a linear ranger of 32-800 ng/ml.

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

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

Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Storage:

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** 

T-Lymphocyte Activation Antigen CD86; Activation B7-2 Antigen; B70; BU63; CTLA-Synonyms:

4 Counter-Receptor B7.2; FUN; CD86; CD28LG2;B7-2;B7.2;CD28LG2;LAB72

### Immunogen Information:

Sequence: Met 1-His 239

### **Background:**

CD86, also known as B-lymphocyte activation antigen B7-2 (referred to as B70), is a member of the cell surface immunoglobulin superfamily. B7-2 exists predominantly as a monomer on cell surfaces and interacts with two co-stimulatory receptors CD28 and cytotoxic T lymphocyte-associated antigen 4 (CTLA-4) expressed on T cells, and thus induces the signal pathways which regulate T cell activation and tolerance, cytokine production, and the generation of CTL. It is indicated that contacts between B and T helper cells mediated by CD86 encourage signals for the proliferation and IgG secretion of normal B cells and B cell lymphomas. Recent study has revealed that CD86 also promotes the generation of a mature APC repertoire and promotes APC function and survival. CD86 has an important role in chronic hemodialysis, allergic pulmonary inflammation, arthritis, and antiviral responses, and thus is regarded as a promising candidate for immune therapy.