

# Recombinant Protein Technical Manual Recombinant Mouse ICOS/AILIM Protein (Fc Tag)

**RPES2585** 

#### **Product Data:**

**Product SKU:** RPES2585 **Size:** 100μg

Species: Mouse Expression host: HEK293 Cells

**Uniprot:** Q9WVS0

#### **Protein Information:**

Molecular Mass: 40.9 kDa

**AP Molecular Mass:** 

Tag: C-Fc

**Bio-activity:** 

**Purity:** > 97 % 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:** 

**Synonyms:** Inducible T-cell costimulator; Activation-inducible lymphocyte immunomediatory

molecule; CD28 and CTLA-4-like protein; CCLP; CD28-related protein 1; CRP;

CD278; Icos; Ailim; AILIM; CCLP; CRP; H4; Ly115

## Immunogen Information:

Sequence: Met 1-Leu 142

### **Background**:

Inducible costimulator (ICOS), also called AILIM (activiation-inducible lymphocyte immunomediatory molecule) is a cell-surface receptor, and belongs to the CD28 family of immune costimulatory receptors consisting of CD28, CTLA-4 and PD. The interaction of B7-H2/ICOS plays a critical role in Th cell differentiation, T–B cell interactions which is essential for germinal center formation, and humoral immune responses, and as well as the production of cytokine IL-4. In addition, ICOS is more potent in the induction of ILO production, a cytokine important for suppressive function of T regulatory cells. The B7/B7-2-CD28/CTLA-4 and ICOS-B7RP pathway provides key second signals that can regulate the activation, inhibition and fine-tuning of T-lymphocyte responses. ICOS stimulates both Th1 and Th2 cytokine production but may have a preferential role in Th2 cell development. Moreover, The B7/B7-2-CD28/CTLA-4 and ICOS-B7RP pathway has been suggested of being involved in the development of airway inflammation and airway hyperresponsiveness.