



Recombinant Protein Technical Manual

Recombinant Rat ICOS/AILIM/CD278 Protein (Fc Tag)
RPES3775

Product Data:

Product SKU: RPES3775

Size: 50µg

Species: Rat

Expression host: HEK293 Cells

Uniprot: Q9R1T7

Protein Information:

Molecular Mass: 40.7 kDa

AP Molecular Mass: 43-47 kDa

Tag: C-Fc

Bio-activity:

Purity: > 95 % 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:

Synonyms: ICOS;Ailim

Immunogen Information:

Sequence: Met1-Leu142

Background:

Inducible costimulator (ICOS), also called AILIM (activation-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 IL10 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.