

# Recombinant Protein Technical Manual

# Recombinant Mouse ICOS Ligand/ICOSL Protein (His & Fc Tag)(Active)

**RPES4083** 

#### **Product Data:**

**Product SKU:** RPES4083 **Size:** 100μg

Species: Mouse Expression host: HEK293 Cells

**Uniprot:** NP\_056605.1

#### **Protein Information:**

Molecular Mass: 54.3 kDa

AP Molecular Mass: 75-85 kDa

**Tag:** C-His-Fc

**Bio-activity:** Measured by its binding ability in a functional ELISA. Immobilized human ICOS at 1

μg/ml (100 μl/well) can bind biotinylated mouse B7-H2 Fc chimera with a linear

range of  $0.125.0 \,\mu\text{g/ml}$ .

**Purity:** > 95 % 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:** Icosl, AU044799, B7-H2, B7RP, B7h, BG071784, GI50, GL50, GL50-B, ICOS-L,

KIAA0653, LICOS, Ly115l, Mkiaa0653

## Immunogen Information:

Sequence: Met 1-Lys 279

## Background:

Inducible co-stimulator ligand (ICOSL), also known as B7-H2, is a member of the B7 family of co-stimulatory molecules related to B7 and B7-2. It is a transmembrane glycoprotein with extracellular IgV and IgC domains, and binds to ICOS on activated T cells, thus delivers a positive costimulatory signal for optimal T cell function. The structural features of ICOSL are crucial for its costimulatory function. Present study shows that ICOSL displays a marked oligomerization potential, resembling more like B7 than B7-2. B7-H2-dependent signaling may play an active role in a proliferative response rather than in cytokine and chemokine production. The CD28/B7 and ICOS/B7-H2 pathways are both critical for costimulating T cell immune responses. Deficiency in either pathway results in defective T cell activation, cytokine production and germinal center formation.