# Mouse ICOS Ligand / B7-H2 / ICOSLG Protein (His Tag)

**Catalog Number:** **50190-M08H**

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Biological Solution Specialist

## General Information

**Gene Name Synonym:**

B7-h2; B7H2; B7RP-1; B7RP1; CD275; GL50; ICOS ligand; ICOS-L; ICOSL; LICOS

**Protein Construction:**

A DNA sequence encoding the mouse B7-H2 (NP_056605.1) extracellular domain (Met 1-Lys 279) was fused with a polyhistidine tag at the C-terminus.

**Source:** Mouse

**Expression Host:** Human Cells

## QC Testing

**Purity:** > 95 % as determined by SDS-PAGE

**Bio Activity:**

**Measured by its binding ability in a functional ELISA. Immobilized mouse B7-H2 at 1 μg/ml (100 μl/well) can bind human ICOS with a linear range of 40-1000 ng/ml.**

**Endotoxin:**

< 1.0 EU per μg of the protein as determined by the LAL method

**Stability:**

Samples are stable for up to twelve months from date of receipt at -70 ℃

**Predicted N terminal:** Glu 47

**Molecular Mass:**

The recombinant mouse B7-H2 comprises 244 amino acids with a predicted molecular mass of 27.8 kDa. As a result of glycosylation, the apparent molecular mass of rmB7-H2 is approximately 45-55 kDa in SDS-PAGE under reducing conditions.

**Formulation:**

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## Usage Guide

**Storage:**

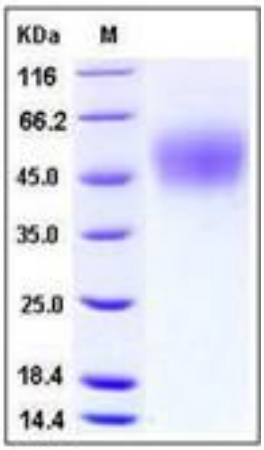
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

**Reconstitution:**

Detailed reconstitution instructions are sent along with the products.

**SDS-PAGE:**




## Protein Description

Inducible co-stimulator ligand (ICOSL), also known as B7-H2, is a member of the B7 family of co-stimulatory molecules related to B7-1 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 B7-1 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.

**References**

1.Flesch IE. (2002) Inducible costimulator-ligand (ICOS-L). J Biol Regul Homeost Agents. 16(3): 217-9.
2.Kajiwara K, *et al.* (2009) Expression and function of the inducible costimulator ligand B7-H2 in human airway smooth muscle cells. Allergol Int. 58(4): 573-83.
3.Wong SC, *et al.* (2009) Functional hierarchy and relative contribution of the CD28/B7 and ICOS/B7-H2 costimulatory pathways to T cell-mediated delayed-type hypersensitivity. Cell Immunol. 256(1-2): 64-71.