

# Human ICOS Ligand / B7-H2 / ICOSLG Protein (His Tag), Biotinylated

Catalog Number: 11559-H08H-B



Sino Biological  
Biological Solution Specialist

## General Information

### Gene Name Synonym:

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

### Protein Construction:

A DNA sequence encoding the human ICOSLG (NP\_056074.1) (Met1-Ser258) was expressed with a C-terminal polyhistidine tag. The purified protein was biotinylated in vitro.

**Source:** Human

**Expression Host:** HEK293 Cells

## QC Testing

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

### Bio Activity:

**Immobilized Recombinant Human ICOS / AILIM / CD278 Protein (His & Fc Tag)(Cat:10344-H03H) at 2 µg/ml (100 µl/well) can bind Recombinant Human ICOS Ligand/B7-H2/ICOSLG Protein(His Tag),Biotinylated(Cat:11559-H08H-B),The EC<sub>50</sub> is 16-50 ng/mL.**

### Endotoxin:

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

**Predicted N terminal:** Asp 19

### Molecular Mass:

The recombinant human ICOSLG consists of 251 amino acids and predicts a molecular mass of 28.1 kDa.

### 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

### Stability & Storage:

Samples are stable for twelve months from date of receipt at -20°C to -80°C.

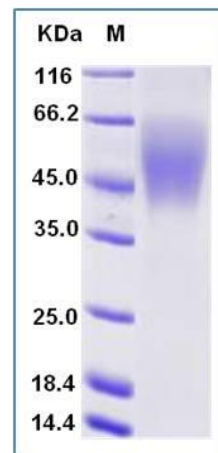
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**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. The 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.

**For Research Use Only. Not for use in diagnostic or therapeutic procedures.**

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