

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

Catalog Number: 11559-H08H



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) extracellular domain (Met 1-Ser 258) was fused with a polyhistidine tag at the C-terminus.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: > 98 % as determined by SDS-PAGE

Bio Activity:

Measured by its binding ability in a functional ELISA . Immobilized human B7-H2 at 1 µg/ml (100 µl/well) can bind human ICOS with a linear range of 1.6-200 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 °C

Predicted N terminal: Asp 19

Molecular Mass:

The secreted recombinant human ICOSLG consists of 251 amino acids and has a calculated molecular mass of 28 kDa. The apparent molecular mass of the protein is approximately 50-60 kDa in SDS-PAGE under reducing conditions as predicted.

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:

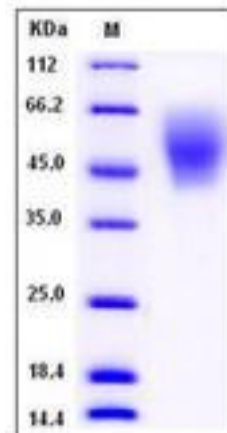
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

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. 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. Kajiwar 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.

Manufactured By Sino Biological Inc., FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

For US Customer: Fax: 267-657-0217 • Tel: 215-583-7898

Global Customer: Fax :+86-10-5862-8288 • Tel:+86-400-890-9989 • <http://www.sinobiological.com>