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

Catalog Number: 11559-H08H

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. > 95 % as determined by SEC-HPLC.

Bio Activity:

Immobilized Recombinant Human ICOS / AILIM / CD278 Protein (Fc Tag)(Cat:10344-H31H) at 2 μg/ml (100 μl/well) can bind Recombinant Human ICOS Ligand / B7-H2 / ICOSLG Protein (ECD,His Tag)(Cat:11559-H08H),The EC_{50} is 63-160 ng/mL.

Endotoxin:

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

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 42-62 kDa in SDS-PAGE under reducing conditions due to glycosylation.

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℃ to -80℃.

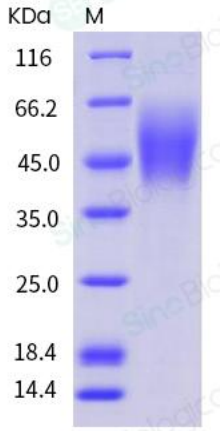
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

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. 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.