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

Catalog Number: **50190-M08H**

Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

B7-H2; B7h; B7RP-1; GI50; GL50; GL50-B; ICOS-L; Icoslg; 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: HEK293 Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Bio Activity:

Immobilized Recombinant Mouse ICOS Ligand / B7-H2 / ICOSLG Protein (His Tag)(Cat:50190-M08H) at 2 μg/ml (100 μl/well) can bind Recombinant Mouse ICOS / AILIM / CD278 Protein (Fc Tag)(Cat:50466-M02H),The EC_{50} is 100-300 ng/mL.

Endotoxin:

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

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

Stability & Storage:
Samples are stable for twelve months from date of receipt at -20℃ to -80℃.

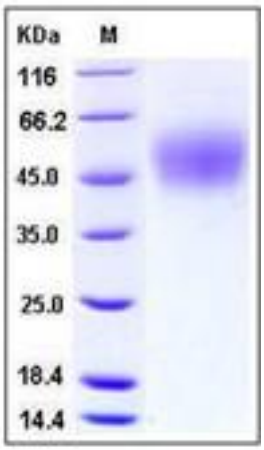
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

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.