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

Catalog Number: 50190-M08H

General Information

Gene Name Synonym:
ICOSLG

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:
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.

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