

# B7-H2/ICOSLG

Catalog # PVGS1559

### Specification

## **B7-H2/ICOSLG - Product Information**

Primary Accession **Species** Human <u>075144</u>

Sequence Asp19-Ser258

Purity > 97% as analyzed by SDS-PAGE

Endotoxin Level < 0.2 EU/  $\mu$ g of protein by gel clotting method

**Biological Activity** 

Immobilized ICOS, hFc, Human (Cat. No.: Z03412) at 5.0 μg/ml (100 μl/well) can bind biotinylated B7-H2/ICOSLG, hFc, Human when detected by Streptavidin-HRP second antibody.

Expression System HEK 293

Formulation

Lyophilized from a 0.2  $\mu m$  filtered solution in PBS, 5% trehalose and mannitol.

**Reconstitution** It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in  $ddH_2O$  or PBS up to 100 µg/ml.

#### Storage & Stability

Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

### **B7-H2/ICOSLG - Additional Information**

Gene ID 23308

Other Names ICOS ligand, B7 homolog 2, B7-H2, B7-like protein GI50, B7-related protein 1, B7RP-1, CD275, ICOSLG

### Target Background

B7-H2, best known as the ligand of inducible co-stimulator, belongs to B7-CD28 family. B7-H2 is a transmembrane glycoprotein of approximately 60 kDa and is expressed on antigen presenting cells such as B cells, macrophages, dendritic cells, and also in monocytes. It's a ligand for CD28



and CTLA-4 in human, whereas these interactions are not conserved in mouse. B7-H2 and B7-1 or B7-2 interacts with CD28 through distinctive domains. B7-H2-CD28 interaction is essential for the co-stimulation of human T cells' primary responses to allogeneic antigens and memory recall responses. Recombinant Human B7-H2 Fc Chimera produced in HEK293 cells. It's a polypeptide chain containing 473 amino acids with the C-termimal human IgG1 Fc fragment. A fully biologically active molecule, rhB7-H2 has a molecular mass of 70-80 kDa, analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at .

### **B7-H2/ICOSLG - Protein Information**

Name ICOSLG

#### **Function**

Ligand for the T-cell-specific cell surface receptor ICOS. Acts as a costimulatory signal for T-cell proliferation and cytokine secretion (PubMed:<a href="http://www.uniprot.org/citations/11007762" target="\_blank">11007762</a>, PubMed:<a href="http://www.uniprot.org/citations/11023515" target="\_blank">11023515</a>, PubMed:<a href="http://www.uniprot.org/citations/30498080" target="\_blank">30498080</a>). Also induces B-cell proliferation and differentiation into plasma cells. Could play an important role in mediating local tissue responses to inflammatory conditions, as well as in modulating the secondary immune response by co-stimulating memory T-cell function (By similarity). In endothelial cells, required for proper neutrophil transmigration in response to chemoattractants, such as CXCL8/IL8 or N-formyl-methionyl peptides (fMLP) (PubMed:<a href="http://www.uniprot.org/citations/30498080" target=" blank">30498080</a>).

**Cellular Location** 

Cell membrane; Single-pass type I membrane protein

#### Tissue Location

Expressed on peripheral blood B-cells and monocytes, as well as on monocyte-derived dendritic cells (at protein level). [Isoform 2]: Detected only in lymph nodes, leukocytes and spleen. Expressed on activated monocytes and dendritic cells.

#### **B7-H2/ICOSLG - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- **B7-H2/ICOSLG Images**