

## **Synonym**

ICOSLG,B7-H2,B7H2,B7RP-1,B7RP1,CD275,GL50,ICOS-L,ICOSL,LICOS,ICOS ligand

## Source

Human B7-H2, Fc Tag(B72-H5254) is expressed from human 293 cells (HEK293). It contains AA Asp 19 - Ser 258 (Accession # O75144-1). Predicted N-terminus: Asp 19

## **Molecular Characterization**

B7-H2(Asp 19 - Ser 258) Fc(Pro 100 - Lys 330)
O75144-1 P01857

This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 53.1 kDa. The protein migrates as 66-90 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### **Endotoxin**

Less than 1.0 EU per µg by the LAL method.

## **Purity**

>95% as determined by SDS-PAGE.

## **Formulation**

Lyophilized from 0.22 µm filtered solution in

Tris with Glycine, Arginine and NaCl, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

#### Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

### Storage

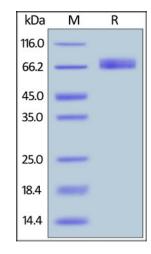
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

## **SDS-PAGE**

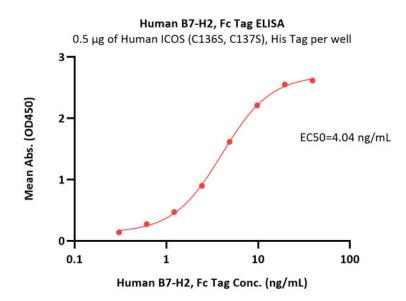


Human B7-H2, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

# **Bioactivity-ELISA**







Immobilized Human ICOS (C136S, C137S), His Tag at 5  $\mu$ g/mL (100  $\mu$ L/well) can bind Human B7-H2, Fc Tag (Cat. No. B72-H5254) with a linear range of 0.3-5  $\mu$ g/mL (QC tested).

## Background

ICOS ligand (ICOSLG) is also known as B7 homolog 2 (B7-H2), B7-related protein 1 (B7RP-1) and CD antigen CD275, which belongs to the immunoglobulin superfamily and BTN/MOG family. ICOSLG contains one Ig-like C2-type (immunoglobulin-like) domain and one Ig-like V-type (immunoglobulin-like) domain. Isoform 1 is widely expressed, while isoform 2 is detected only in lymph nodes, leukocytes and spleen. B7-H2 is ligand for the T-cell-specific cell surface receptor ICOS. B7-H2 acts as a costimulatory signal for T-cell proliferation and cytokine secretion and induces also B-cell proliferation and differentiation into plasma cells. B7-H2 could play an important role in mediating local tissue responses to inflammatory conditions, as well as in modulating the secondary immune response by costimulating memory T-cell function.

# **Clinical and Translational Updates**

