

Synonym

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

Source

Rat B7-H2, Fc Tag(B72-R5259) is expressed from human 293 cells (HEK293). It contains AA Glu 25 - Lys 261 (Accession # XP_006256322.1).

Predicted N-terminus: Glu 25

Molecular Characterization

B7-H2(Glu 25 - Lys 261) Fc(Pro 100 - Lys 330) XP_006256322.1 P01857

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

The protein has a calculated MW of 53.4 kDa. The protein migrates as 70-100 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method / rFC method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from $0.22~\mu m$ filtered solution in 50~mM Tris, 100~mM Glycine, 25~mM Arginine, 150~mM 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

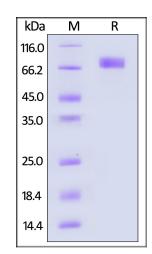
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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

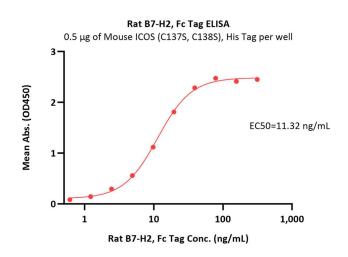


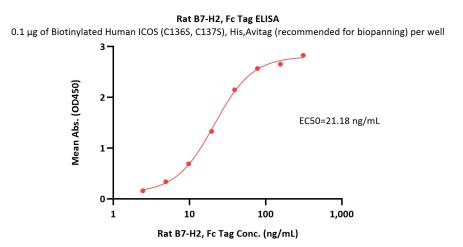
Rat B7-H2, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ELISA









Immobilized Mouse ICOS (C137S, C138S), His Tag (Cat. No. ICS-M52H8) at 5 μ g/mL (100 μ L/well) can bind Rat B7-H2, Fc Tag (Cat. No. B72-R5259) with a linear range of 0.6-39 ng/mL (QC tested).

Immobilized Biotinylated Human ICOS (C136S, C137S), His,Avitag (recommended for biopanning) (Cat. No. ICS-H82E5) at 1 μ g/mL (100 μ L/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 μ g/well) plate can bind Rat B7-H2, Fc Tag (Cat. No. B72-R5259) with a linear range of 2-39 ng/mL (Routinely 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.