

Human B7-H2/ICOSLG Protein, Ultra Low Endotoxin



Cat. No. BH7-HM272-UL

Description

Source	Recombinant Human B7-H2/ICOSLG Protein is expressed from HEK293 with hFc (IgG1) tag at the C-Terminus. It contains Asp19-Ser258.
Accession	O75144-1
Molecular Weight	The protein has a predicted MW of 53.4 kDa. Due to glycosylation, the protein migrates to 75-100 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 0.01 EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

B7-H2, also known as B7-related protein (B7RP1), ICOS Ligand, and CD275, is an approximately 60 kDa transmembrane glycoprotein in the B7 family of immune regulatory molecules. B7-H2 is a ligand for the T-cell-specific cell surface receptor ICOS. Acts as a costimulatory signal for T-cell proliferation and cytokine secretion; induces also B-cell proliferation and differentiation into plasma cells.

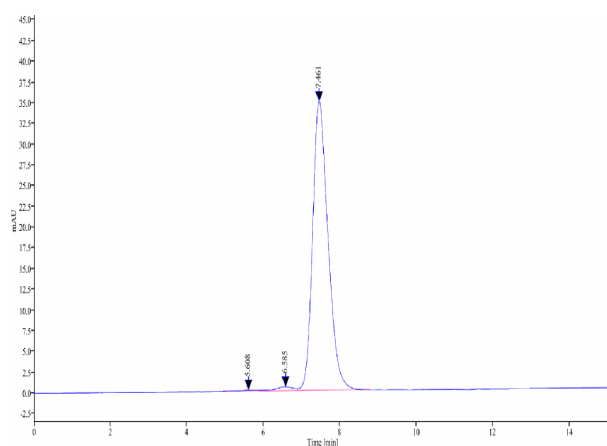
Assay Data

Bis-Tris PAGE



Human B7-H2 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



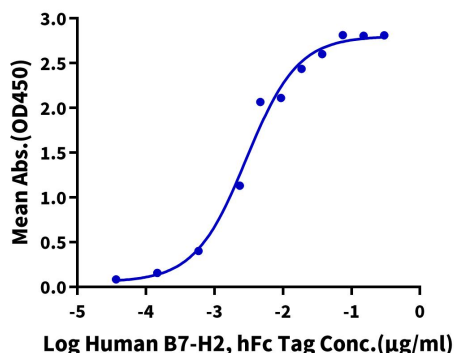
The purity of Human B7-H2 is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

Human B7-H2, hFc Tag ELISA

0.5µg Human ICOS (C136S, C137S), His Tag Per Well

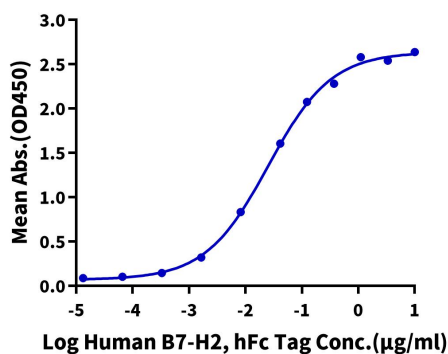


Immobilized Human ICOS (C136S, C137S), His Tag (Cat. ICO-HM102) at 5µg/ml (100µl/well) on the plate. Dose response curve for Human B7-H2, hFc Tag with the EC50 of 2.9ng/ml determined by ELISA.

ELISA Data

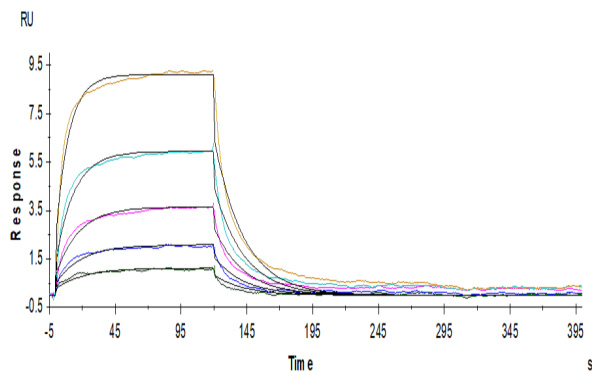
Human B7-H2, hFc Tag ELISA

0.05µg Human ICOS, His Tag Per Well



Immobilized Human ICOS, His Tag at 0.5µg/ml (100µl/Well) on the plate. Dose response curve for Human B7-H2, hFc Tag with the EC50 of 25.3ng/ml determined by ELISA.

SPR Data



Human B7-H2 captured on Protein A chip, can bind Human ICOS (C136S,C137S) , His Tag with an affinity constant of 40.2nM as determined in a SPR assay (Biacore T200).