

## ICOS ligand Protein, Human, Recombinant (hFc)

### General Information

Synonyms:	inducible T-cell co-stimulator ligand; ICOS ligand; CD275; B7H2; ICOS-L; B7-h2; B7RP1; ICOSL; GL50; LICOS; B7RP-1; ICOSLG
Protein Construction:	Asp19-Ser258
Species:	Human
Expression Host:	HEK293 Cells
Accession:	O75144-1
Molecular Weight:	53.4 kDa (Predicted); 75-100 kDa (Due to glycosylation)

### QC Testing

Biological Activity:	Immobilized Human ICOS, His Tag at 0.5 µg/ml (100 µl/well) on the plate. Dose response curve for Human B7-H2, hFc Tag with the EC50 of 42.7 ng/ml determined by ELISA (QC Test). 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).
Purity:	> 95% as determined by Tris-Bis PAGE; > 95% as determined by HPLC
Endotoxin:	< 1.0 EU/µg of the protein as determined by the LAL method.
Formulation:	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.

### Preparation and Storage

Reconstitution:	Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 µg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.
Stability & Storage:	It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots. <small>Actual storage temperature shall be subject to the COA.</small>
Shipping:	In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

### Protein 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.

### Reference

Flesch IE. (2002) Inducible costimulator-ligand (ICOS-L). J Biol Regul Homeost Agents. 16(3): 217-9.

Kajiwara K, et al. (2009) Expression and function of the inducible costimulator ligand B7-H2 in human airway smooth muscle cells. Allergol Int. 58(4): 573-83.

Wong SC, et al. (2009) Functional hierarchy and relative contribution of the CD28/B7 and ICOS/B7-H2 costimulatory pathways to T cell-mediated delayed-type hypersensitivity. Cell Immunol. 256(1-2): 64-71.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481