

## Recombinant Human ICOS/AILIM Protein (His &Fc Tag)

**Catalog Number:** PKSH031664

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

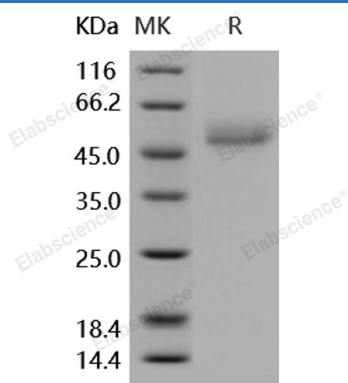
### Description

<b>Species</b>	Human
<b>Source</b>	HEK293 Cells-derived Human ICOS/AILIM protein Met 1-Phe 141, with an C-terminal His & Fc
<b>Calculated MW</b>	41.6 kDa
<b>Observed MW</b>	50 kDa
<b>Accession</b>	NP_036224.1
<b>Bio-activity</b>	Immobilized human human B7-H2 at 1 µg/ml (100 µl/well) can bind human ICOS with a linear range of 1. 6-200 ng/ml.

### Properties

<b>Purity</b>	> 90 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile PBS, pH 7.4 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 90 % as determined by reducing SDS-PAGE.

### Background

### For Research Use Only

Inducible costimulator (ICOS), also called AILIM (activation-inducible lymphocyte immunomediatory molecule) is a cell-surface receptor, and belongs to the CD28 family of immune costimulatory receptors consisting of CD28, CTLA-4 and P D-1. The interaction of B7-H2/ICOS plays a critical role in Th cell differentiation, T<sup>+</sup>B cell interactions which is essential for germinal center formation, and humoral immune responses, and as well as the production of cytokine IL-4. In addition, ICOS is more potent in the induction of IL-10 production, a cytokine important for suppressive function of T regulatory cells. The B7-1/B7-2-CD28/CTLA-4 and ICOS-B7RP-1 pathway provides key second signals that can regulate the activation, inhibition and fine-tuning of T-lymphocyte responses. ICOS stimulates both Th1 and Th2 cytokine production but may have a preferential role in Th2 cell development. Moreover, The B7-1/B7-2-CD28/CTLA-4 and ICOS-B7RP-1 pathway has been suggested of being involved in the development of airway inflammation and airway hyperresponsiveness.