

Recombinant Human ICOS protein, C-hFc Tag

Product Information

Cat	IMP-419
Official Symbol	ICOS
Product Overview	Recombinant Human ICOS protein (NP_036224.1) (Met1-Phe141) was expressed in HEK293, fused with the Fc region of human IgG1 at the C-terminus.
Description	Inducible costimulator (ICOS), also called ALIM (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 PD-1. The interaction of B7-H2/ICOS plays a critical role in Th cell differentiation, T-B cell interactions which are essential for the germinal center formation, and humoral immune responses, and as well as the production of cytokine IL-4. Also, ICOS is more potent in the induction of IL-10 production, a cytokine important for the suppressive function of T regulatory cells. The B7-1/B7-2-CD28/CTLA-4 and ICOS-B7RP-1 pathway provide 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 as being involved in the development of airway inflammation and airway hyperresponsiveness.
Expression System	HEK293
Species	Human
Tag	C-hFc Tag
Predicted N Terminal	Glu 21
Form	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.
Molecular Mass	The recombinant human ICOS consists of 359 amino acids and predicts a molecular mass of 40.5 kDa.
Protein length	Met1-Phe141
Endotoxin	< 1.0 EU per µg protein as determined by the LAL method.
Purity	> 95 % as determined by SDS-PAGE.
Storage	Samples are stable for up to twelve months from date of receipt at -20°C to -80°C. Store it under sterile conditions at -20°C to -80°C. It is

recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

Reconstitution

It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 ug/ul. Centrifuge the vial at 4°C before opening to recover the entire contents.