

Recombinant Human ICOS protein

Cat. No. ICOS-390H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human ICOS(Met 1-Phe 141) was expressed in HEK293.
Species	Human
Source	HEK293
ProteinLength	Met 1-Phe 141
Description	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 PD-1. The interaction of B7-H2/ICOS plays a critical role in Th cell differentiation, T-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.
Predicted N Terminal	Glu 21

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Form	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose and mannitol are added as protectants before lyophilization.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method
Purity	> 94 % as determined by SDS-PAGE
Stability	Samples are stable for up to twelve months from date of receipt at -70 centigrade
Storage	Store it under sterile conditions at -20 centigrade to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Reconstitution	A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

GENE INFORMATION

Gene Name	ICOS inducible T-cell co-stimulator [Homo sapiens]
Official Symbol	ICOS
Synonyms	ICOS; inducible T-cell co-stimulator; inducible T-cell costimulator; activation inducible lymphocyte immunomediatory molecule; AILIM; CD278; inducible costimulator; activation-inducible lymphocyte immunomediatory molecule; CVID1; MGC39850;
Gene ID	29851

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mRNA Refseq	NM_012092
Protein Refseq	NP_036224
MIM	604558
UniProt ID	Q9Y6W8
Chromosome Location	2q33
Pathway	Adaptive Immune System, organism-specific biosystem; Cell adhesion molecules (CAMs), organism-specific biosystem; Cell adhesion molecules (CAMs), conserved biosystem; Costimulation by the CD28 family, organism-specific biosystem; Immune System, organism-specific biosystem; Intestinal immune network for IgA production, organism-specific biosystem; Intestinal immune network for IgA production, conserved biosystem;

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