

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

Catalog No. PKSH031664

Description

Synonyms	Inducible T-cell costimulator;activation-inducible lymphocyte immunomediatory molecule; CD278; AILIM; CVID1;ICOS;
Species	Human
Expression_host	HEK293 Cells
Sequence	Met 1-Phe 141
Accession	NP_036224.1
Mol_Mass	41.6 kDa
AP_Mol_Mass	50 kDa
Tag	C-His & Fc
Bio_activity	Measured by its binding ability in a functional ELISA. 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

Purity	> 90 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg as determined by the LAL method.
Storage	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.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4
Reconstitution	Please refer to the printed manual for detailed information.

Background

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.

SDS-PAGE

