

Recombinant Human ICOS/CD278 Protein

Catalog No.: RP01401 **Recombinant**

Sequence Information

Species	Gene ID	Swiss Prot
Human	29851	Q9Y6W8

Tags

C-hFc&His

Synonyms

AILIM; CD278; CVID1; ICOS; CD278; CVID1

Product Information

Source	Purification
HEK293 cells	> 95% by SDS-PAGE.

Endotoxin

<0.1EU/μg

Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact

 | 400-999-6126 | cn.market@abclonal.com.cn | www.abclonal.com.cn

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_H 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.

Basic Information

Description

Recombinant Human ICOS/CD278 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Glu21-Phe141) of human ICOS/CD278 (Accession #NP_036224.1) fused with a Fc, 6×His tag at the C-terminus.

Bio-Activity

Measured by its binding ability in a functional ELISA. Immobilized human B7-H2/ICOSLG at 1 μg/mL (100 μL/well) can bind Human ICOS/CD278 with a linear range of 2-14.8 ng/mL.

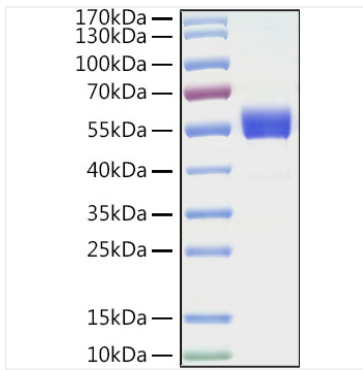
Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

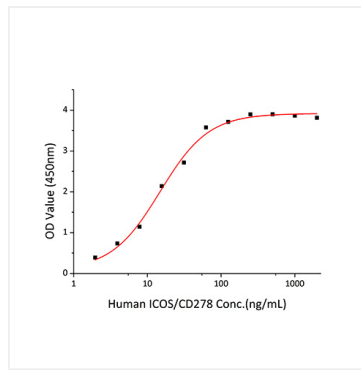
After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

Avoid repeated freeze/thaw cycles.

Validation Data



Recombinant Human ICOS/CD278 Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 52-62kDa.



Immobilized Recombinant Human B7-H2/ICOSLG at 1 $\mu\text{g/mL}$ (100 $\mu\text{L/well}$) can bind Human ICOS/CD278 with a linear range of 2-14.8 ng/mL.