

Human ICOS/CD278 Protein



Cat. No. ICO-HM201

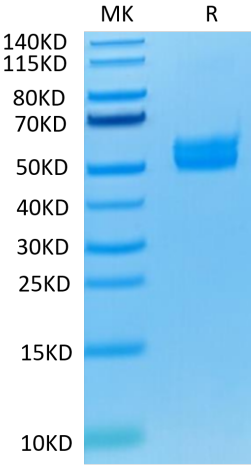
| Description | |
|------------------|--|
| Source | Recombinant Human ICOS/CD278 Protein is expressed from HEK293 with hFc tag at the C-Terminus. It contains Glu21-Phe141. |
| Accession | Q9Y6W8-1 |
| Molecular Weight | The protein has a predicted MW of 40.5 kDa. Due to glycosylation, the protein migrates to 52-60 kDa based on Tris-Bis PAGE result. |
| Endotoxin | Less than 1EU per µg by the LAL method. |
| Purity | > 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC |

| Formulation and Storage | |
|-------------------------|---|
| Formulation | Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization. |
| Reconstitution | Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water. |
| Storage | -20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles. |

| Background | |
|--|--|
| Inducible co-stimulator (ICOS), also called AILIM (activation-inducible lymphocyte immunomediatory molecule) and CRP-1 (CD28-related protein-1), is a member of the growing CD28 family of immune costimulatory receptors. Other family members are CD28, CTLA-4 and PD-1. Human ICOS is a homodimeric type I transmembrane protein consisting of 199 amino acids (aa) with a putative 20 aa signal sequence, a 121 aa extracellular domain, a 23 aa transmembrane region, and a 35 aa cytoplasmic domain. | |

Assay Data

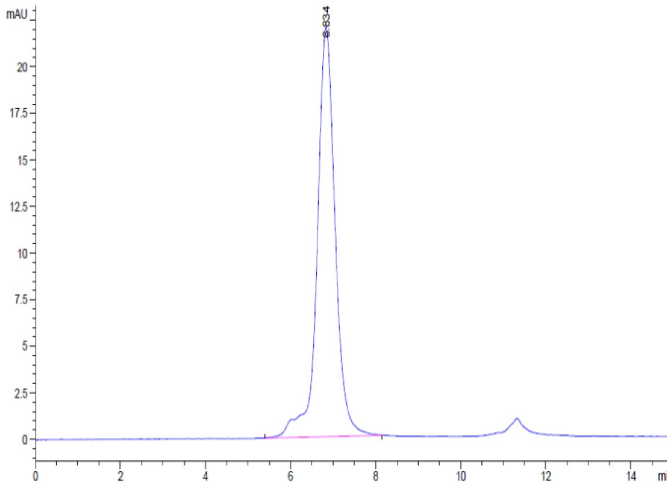
Tris-Bis PAGE



Human ICOS on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC

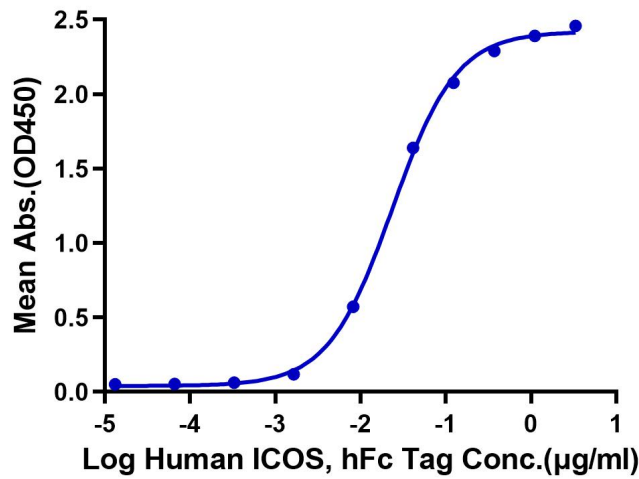
Assay Data



The purity of Human ICOS is greater than 95% as determined by SEC-HPLC.

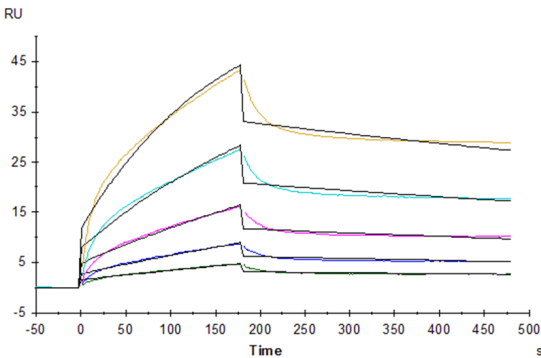
ELISA Data

Human ICOS, hFc Tag ELISA
0.05µg Human B7-H2, His Tag Per Well



Immobilized Human B7-H2, His Tag at 0.5µg/ml (100µl/Well) on the plate. Dose response curve for Human ICOS, hFc Tag with the EC50 of 23.6ng/ml determined by ELISA (QC Test).

SPR Data



Human ICOS, hFc Tag captured on CM5 Chip via Protein A can bind Cynomolgus B7-H2, His Tag with an affinity constant of 5.42 nM as determined in SPR assay (Biacore T200).