Biotinylated Human CD40/TNFRSF5 Protein





| Description | |
|---------------------|--|
| Source | Recombinant Biotinylated Human CD40/TNFRSF5 Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. |
| | It contains Glu21-Arg193. |
| Accession | P25942 |
| Molecular Weight | The protein has a predicted MW of 22.1 kDa. Due to glycosylation, the protein migrates to 35-40 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 receipt20 to -80°C for 3-6 months in unopened state after |

Storage 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

CD40 is a costimulatory protein found on antigen presenting cells and is required for their activation. The binding of CD154 (CD40L) on TH cells to CD40 activates antigen presenting cells and induces a variety of downstream effects.CD40 molecule is a potential target for cancer immunotherapy. There are number of completed and ongoing clinical trials where agonistic anti-CD40 monoclonal antibodies are employed to activate an anti-tumor T cell response via activation of dendritic cells.

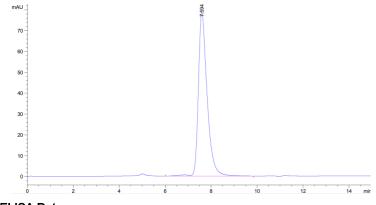
Assay Data

Tris-Bis PAGE



Biotinylated Human CD40 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



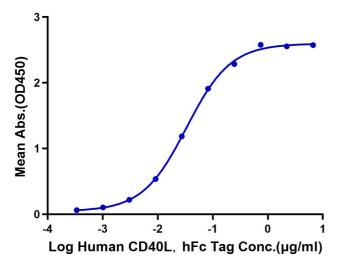
The purity of Biotinylated Human CD40 is greater than 95% as determined by SEC-HPLC.

ELISA Data

Assay Data



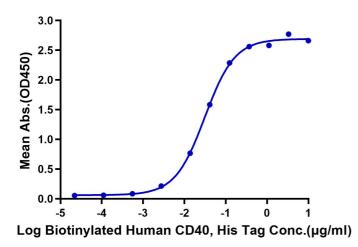
Biotinylated Human CD40, His Tag ELISA 0.1µg Biotinylated Human CD40, His Tag Per Well



Immobilized Biotinylated Human CD40, His Tag at $1\mu g/ml$ ($100\mu l/Well$) on the plate. Dose response curve for Human CD40L, hFc Tag with the EC50 of 33ng/ml determined by ELISA.

ELISA Data

Biotinylated Human CD40, His Tag ELISA 0.1µg Anti-CD40 Antibody, hFc Tag Per Well



Immobilized Anti-CD40 Antibody at 1µg/ml (100µl/well) on the plate. Dose response curve for Biotinylated Human CD40, His Tag with the EC50 of 31.3ng/ml determined by ELISA.

Blocking Data

Inhibition of Human CD40 Ligand (Trimer) and CD40 Binding

0.5µg Human CD40 Ligand (Trimer), hFc Tag Per Well

Serial dilutions of Anti-CD40 Antibody were added into Biotinylated Human CD40, His Tag: Human CD40 Ligand (Trimer), hFc Tag binding reactioins. The half maximal inhibitiory concentration (IC50) is 2.0ug/ml.