Biotinylated Human CD30 / TNFRSF8 Protein, Avitag™,His Tag (MALS verified)

Catalog # CD0-H82E6

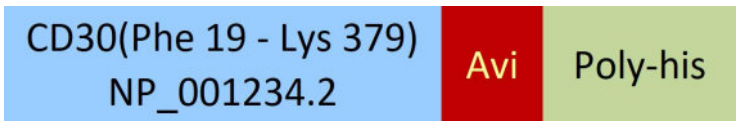
Synonym

TNFRSF8,CD30,D1S166E,Ki-1

Source

Biotinylated Human CD30, Avitag,His Tag(CD0-H82E6) is expressed from human 293 cells (HEK293). It contains AA Phe 19 - Lys 379 (Accession # NP_001234.2).
Predicted N-terminus: Phe 19

Molecular Characterization



This protein carries an Avi tag (Avitag™) at the C-terminus, followed by a polyhistidine tag.

The protein has a calculated MW of 41.1 kDa. The protein migrates as 55-90 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Endotoxin

Less than 0.1 EU per μg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

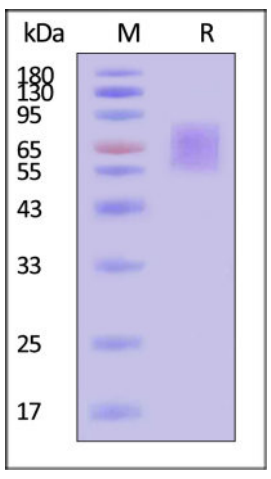
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

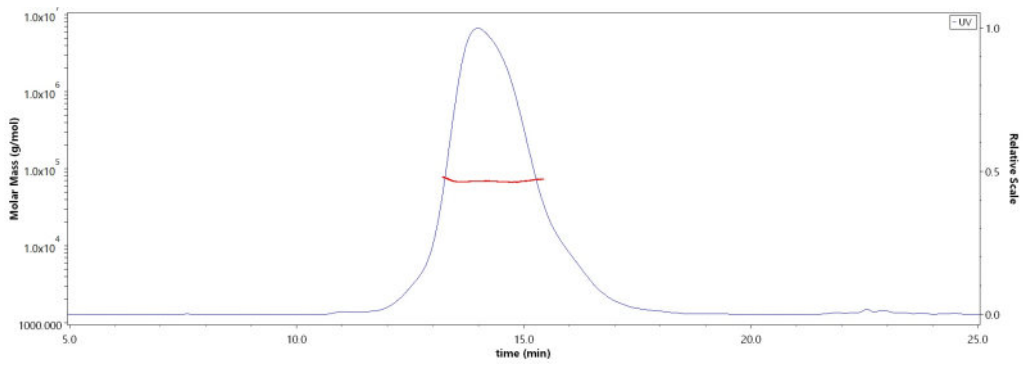
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



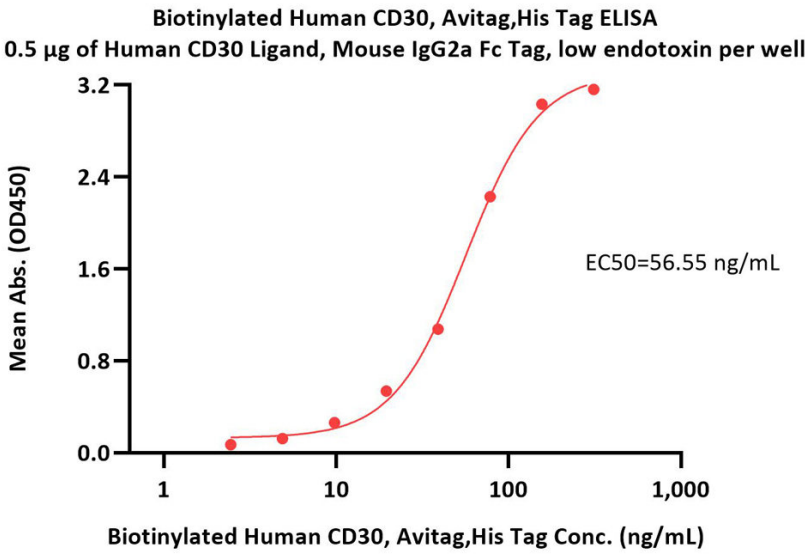
Biotinylated Human CD30, Avitag,His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

SEC-MALS

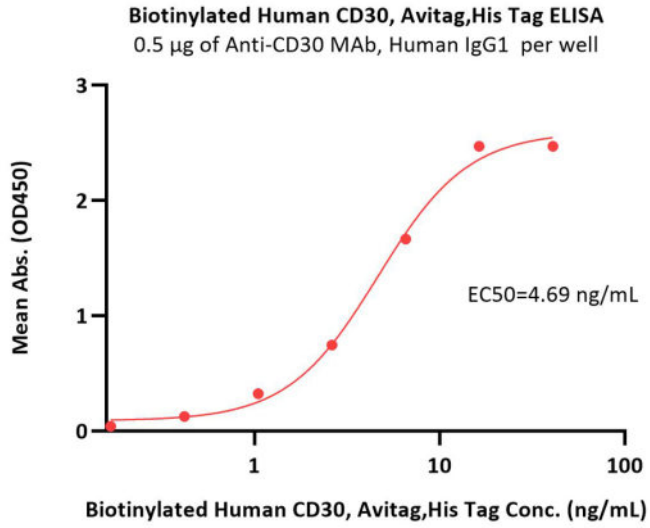


The purity of Biotinylated Human CD30, Avitag,His Tag (Cat. No. CD0-H82E6) is more than 95% and the molecular weight of this protein is around 65-75 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA

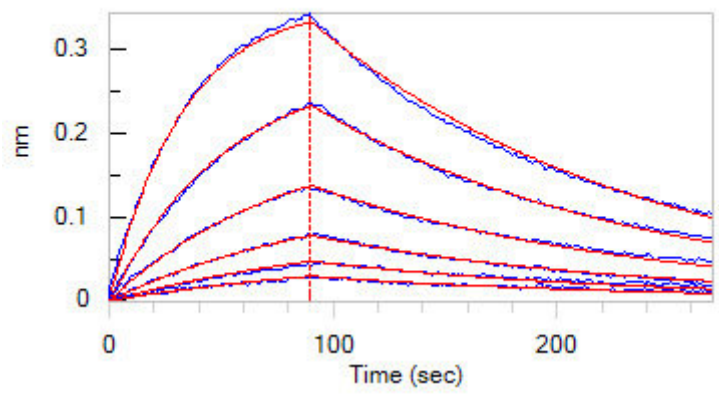


Immobilized Human CD30 Ligand, Mouse IgG2a Fc Tag, low endotoxin (Cat. No. CDL-H525b) at 5 μg/mL (100 μL/well) can bind Biotinylated Human CD30, Avitag,His Tag (Cat. No. CD0-H82E6) with a linear range of 2-78 ng/mL (QC tested).



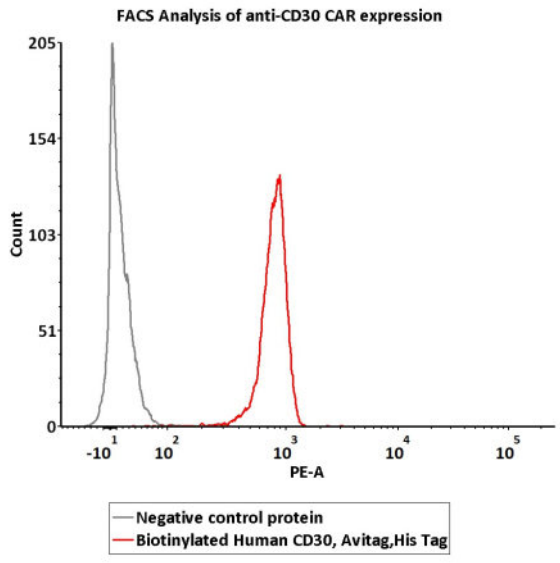
Immobilized Anti-CD30 MAb, Human IgG1 at 5 μg/mL (100 μL/well) can bind Biotinylated Human CD30, Avitag,His Tag (Cat. No. CD0-H82E6) with a linear range of 0.4-6.5 ng/mL (Routinely tested).

Bioactivity-BLI



Loaded Biotinylated Human CD30, Avitag,His Tag (Cat. No. CD0-H82E6) on SA Biosensor, can bind Human CD30 Ligand, His Tag, low endotoxin (Cat. No. CDL-H524b) with an affinity constant of 139 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Bioactivity-FACS



2e5 of anti-CD30 CAR-293 cells were stained with 100 μL of 0.1 μg/mL of Biotinylated Human CD30, Avitag,His Tag (Cat. No. CD0-H82E6) and

negative control protein respectively, washed and then followed by PE-SA and analyzed with FACS (Routinely tested).

Background

Human CD30 is also known as TNFRSF8, is a cell membrane protein of the tumor necrosis factor receptor family and tumor marker. TNFRSF-8 is expressed by activated, but not by resting, T and B cells. Also, CD30 is expressed on classical Hodgkin Lymphoma cells together with CD15. CD30 is the receptor for TNFSF8/CD30L. CD30 can interact with TRAF2 and TRAF5, and mediate the signal transduction that leads to the activation of NF-kappa-B. TNFRSF8 may play a role in the regulation of cellular growth and transformation of activated lymphoblasts. TNFRSF8 is a positive regulator of apoptosis, and also has been shown to limit the proliferative potential of autoreactive CD8 effector T cells and protect the body against autoimmunity.

Clinical and Translational Updates