

### **Synonym**

Delta3,delta-like 3 (Drosophila),delta-like protein 3,DLL3,Pudgy,SCDO1,SCDO1delta3

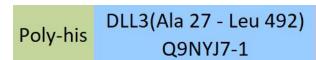
## Source

Biotinylated Human DLL3 Protein, His, Avitag, premium grade(DL3-H82E3) is expressed from human 293 cells (HEK293). It contains AA Ala 27 - Leu 492 (Accession # Q9NYJ7-1).

Predicted N-terminus: His

It is produced under our rigorous quality control system that incorporates a comprehensive set of tests including sterility and endotoxin tests. Product performance is carefully validated and tested for compatibility for cell culture use or any other applications in the early preclinical stage. When ready to transition into later clinical phases, we also offer a custom GMP protein service that tailors to your needs. We will work with you to customize and develop a GMP-grade product in accordance with your requests that also meets the requirements for raw and ancillary materials use in cell manufacturing of cell-based therapies.

# **Molecular Characterization**





This protein carries a polyhistidine tag at the N-terminus and an Avi tag (Avitag<sup>TM</sup>) at the C-terminus.

The protein has a calculated MW of 52.6 kDa. The protein migrates as 55-60 kDa under reducing (R) condition, and 48-53 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under non-reducing (NR) condition (SDS-PAGE) due to glycosylation.

# Labeling

Biotinylation of this product is performed using Avitag<sup>TM</sup> 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 0.01 EU per µg by the LAL method.

# **Host Cell DNA**

<0.02 ng/μg of protein tested by qPCR.

## **Sterility**

The sterility testing was performed by membrane filtration method.

#### Mycoplasma

Negative.

#### **Purity**

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

#### **Formulation**

Lyophilized from  $0.22~\mu m$  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  $-20^{\circ}$ C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 24 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

**SDS-PAGE** 

SEC-MALS

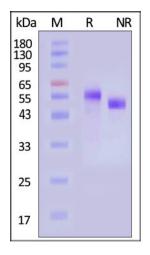


# Biotinylated Human DLL3 Protein, His,Avitag™, premium grade



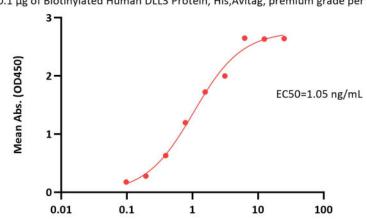
**Bioactivity-ELISA** 





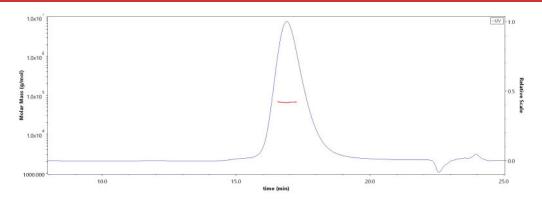
Biotinylated Human DLL3 Protein, His, Avitag, premium grade on SDS-PAGE under reducing (R) and non-reducing (NR) conditions. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

Biotinylated Human DLL3 Protein, His, Avitag, premium grade ELISA  $0.1\,\mu g$  of Biotinylated Human DLL3 Protein, His, Avitag, premium grade per well



Anti-DLL3 Antibody (specific Binding EGF5 of DLL3), Human IgG1 Conc. (ng/mL)

Immobilized Biotinylated Human DLL3 Protein, His, Avitag, premium grade (Cat. No. DL3-H82E3) at 1 µg/mL (100 µL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 µg/well) plate can bind Anti-DLL3 Antibody (specific Binding EGF5 of DLL3), Human IgG1 with a linear range of 0.1-3 ng/mL (QC tested).



The purity of Biotinylated Human DLL3 Protein, His, Avitag, premium grade (Cat. No. DL3-H82E3) is more than 90% and the molecular weight of this protein is around 55-75 kDa verified by SEC-MALS. Report

### Background

Delta-like protein 3 (DLL3) is a transmembrane protein that belongs to the Delta/Serrate/Lag-2 (DSL) family of Notch ligands. May be required to divert neurons along a specific differentiation pathway. Plays a role in the formation of somite boundaries during segmentation of the paraxial mesoderm. DLL3 protein is expressed on the surface of tumor cells but not in normal adult tissues.

## **Clinical and Translational Updates**

