

### **Synonym**

DLL4,Delta4

#### Source

Human DLL4 Protein, Fc Tag(DL4-H5259) is expressed from human 293 cells (HEK293). It contains AA Ser 27 - Pro 524 (Accession # NP\_061947.1). Predicted N-terminus: Ser 27

#### **Molecular Characterization**

DLL4(Ser 27 - Pro 524) Fc(Pro 100 - Lys 330) NP\_061947.1 P01857

This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 80.9 kDa. The protein migrates as 95-100 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### Endotoxin

Less than 0.01 EU per µg by the LAL method.

### **Sterility**

Negative

#### **Purity**

>95% as determined by SDS-PAGE.

#### **Formulation**

Lyophilized from 0.22 µm filtered solution in 100 mM Glycine, 150 mM NaCl, 25 mM Arginine, 50 mM Tris, pH7.5 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**

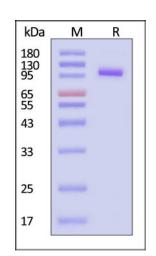
For long term storage, the product should be stored at lyophilized state at -20 $^{\circ}$ C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

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

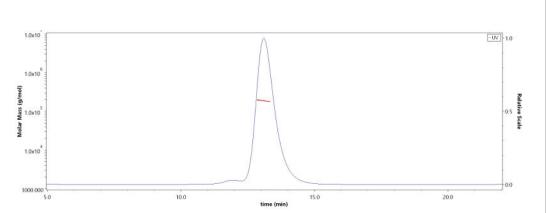
## SDS-PAGE



Human DLL4 Protein, Fc 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 <u>Star Ribbon Pre-stained Protein Marker</u>).

## **Bioactivity-ELISA**

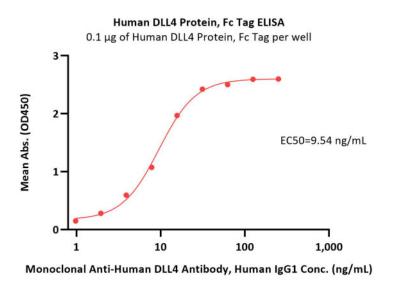
#### **SEC-MALS**

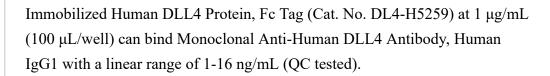


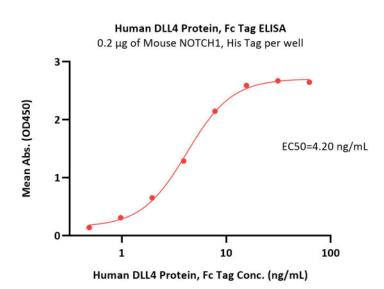
The purity of Human DLL4 Protein, Fc Tag (Cat. No. DL4-H5259) is more than 85% and the molecular weight of this protein is around 175-215 kDa verified by SEC-MALS.

Report



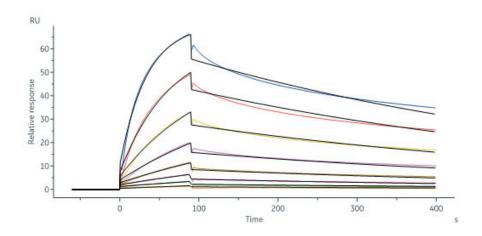






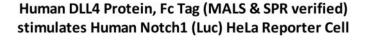
Immobilized Mouse NOTCH1, His Tag (Cat. No. NO1-M52H8) at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Human DLL4 Protein, Fc Tag (Cat. No. DL4-H5259) with a linear range of 0.5-8 ng/mL (Routinely tested).

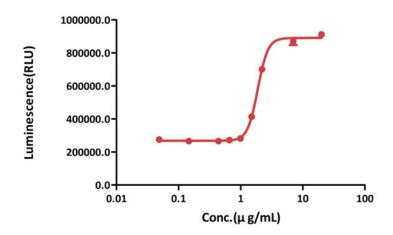
### **Bioactivity-SPR**



Human DLL4 Protein, Fc Tag (Cat. No. DL4-H5259) captured on Protein A Chip can bind Human NOTCH1 Protein, His Tag, premium grade (Cat. No. NO1-H52H3) with an affinity constant between 1.00 nM - 150 nM as determined in a SPR assay (Biacore 8K) (QC tested).

### **Bioactivity-CELL BASE**





Human DLL4 Protein, Fc Tag (Cat. No. DL4-H5259) stimulates Human Notch1 (Luc) HeLa Reporter Cell. The EC50 of the effect is 1.88 μg/mL



# **Human DLL4 Protein, Fc Tag (MALS & SPR verified)**

Catalog # DL4-H5259



(Routinely tested).

## **Background**

Delta-like protein 4 (DLL4) is also known as Drosophila Delta homolog 4 (Delta4), which contains one DSL domain and eight EGF-like domains. DLL4 is expressed in vascular endothelium. DLL4 is involved in the Notch signaling pathway as Notch ligand, which can activates NOTCH1 and NOTCH4. DLL4 is involved in angiogenesis and negatively regulates endothelial cell proliferation and migration and angiogenic sprouting. DLL4 can bind to Notch-1 and Notch-4.

**Clinical and Translational Updates** 

