

# **Synonym**

DLL4,Delta4

### Source

Human DLL4 Protein, His Tag(DL4-H5227) is expressed from human 293 cells (HEK293). It contains AA Ser 27 - Pro 524 (Accession # Q9NR61-1). Predicted N-terminus: Ser 27

### **Molecular Characterization**

DLL4(Ser 27 - Pro 524) Q9NR61-1

Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 56.2 kDa. The protein migrates as 55-65 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### **Endotoxin**

Less than 0.01 EU per µg by the LAL method.

# **Sterility**

Negative

# 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**

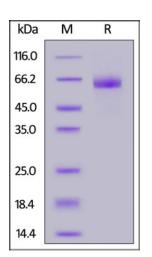
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

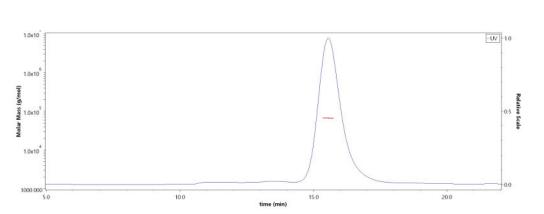
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

# **SDS-PAGE**



Human DLL4 Protein, 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%.

### **SEC-MALS**



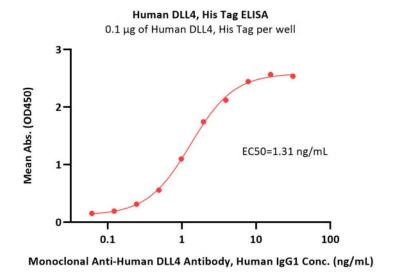
The purity of Human DLL4 Protein, His Tag (Cat. No. DL4-H5227) is more than 90% and the molecular weight of this protein is around 56-76 kDa verified by SEC-MALS.

Report

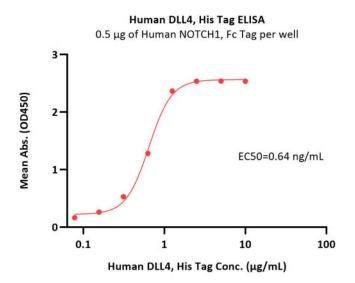




# **Bioactivity-ELISA**



Immobilized Human DLL4 Protein, His Tag (Cat. No. DL4-H5227) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Monoclonal Anti-Human DLL4 Antibody, Human IgG1 with a linear range of 0.1-4 ng/mL (QC tested).



Immobilized Human NOTCH1, Fc Tag (Cat. No. NO1-H5255) at 5  $\mu$ g/mL (100  $\mu$ L/well) can bind Human DLL4 Protein, His Tag (Cat. No. DL4-H5227) with a linear range of 0.078-1.25  $\mu$ g/mL (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**

