

Synonym

DLL4,Delta4

Source

Human DLL4 Protein, Fc Tag, premium grade (Flagship)(DL4-H5255) is expressed from human 293 cells (HEK293). It contains AA Ser 27 - Pro 524 (Accession # [NP_061947.1](#)).

Predicted N-terminus: Ser 27

This Flagship Premium Grade product 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 other applications in the early preclinical stage. When ready to transition into later clinical phases, we also offer a GMP equivalent GMP-DL4H27, GMP Human DLL4 Protein, Fc Tag (Flagship), which has an identical performance profile, thereby ensuring a seamless transition.

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 80.7 kDa. The protein migrates as 90 kDa±3 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 0.01 EU per µg by the LAL method / rFC method.

Protein A

<5 ppm of protein tested by ELISA.

Host Cell Protein

<0.5 ng/µg of protein tested by ELISA.

Host Cell DNA

<0.02 ng/µg of protein tested by qPCR.

Sterility

Negative

Mycoplasma

Negative

Purity

>95% as determined by SDS-PAGE.

>90% 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 24 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

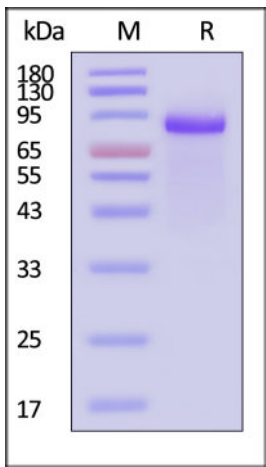
SEC-MALS

Discounts, Gifts,
and more!

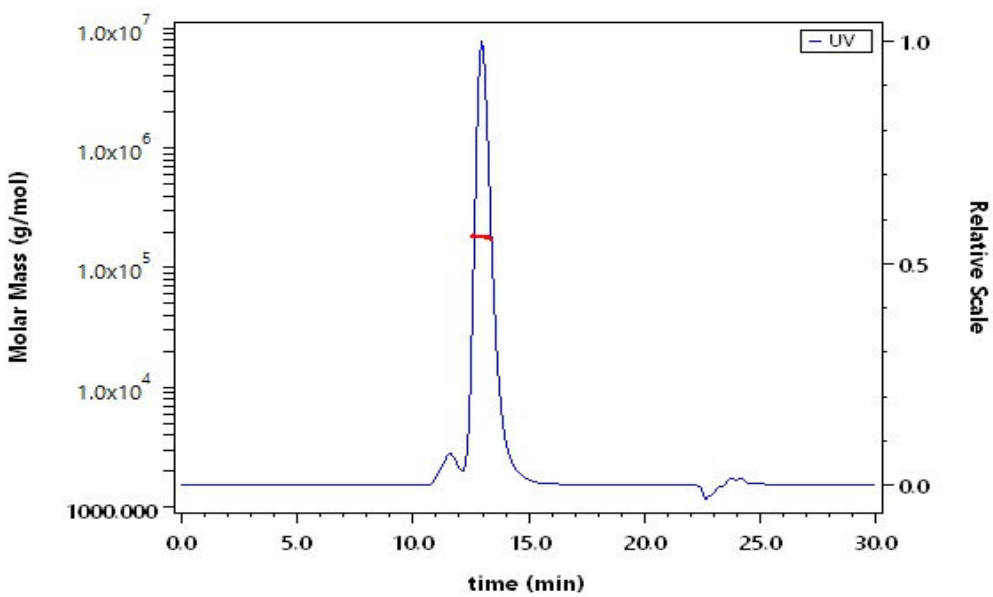


Human DLL4 Protein, Fc Tag, premium grade (Flagship)

Catalog # DL4-H5255



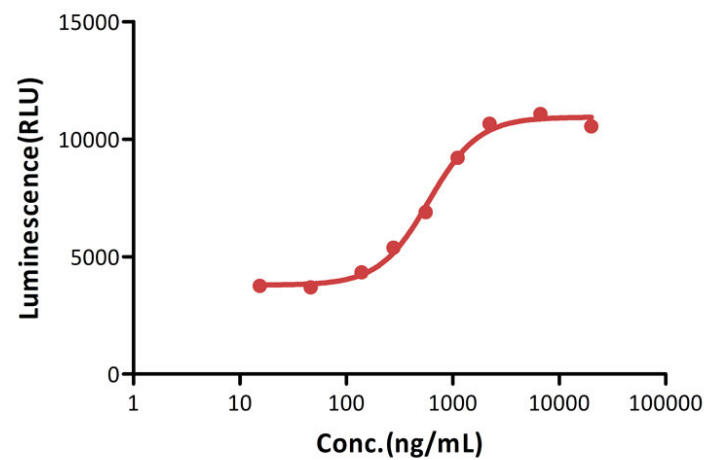
Human DLL4 Protein, Fc Tag, premium grade (Flagship) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With [Star Ribbon Pre-stained Protein Marker](#)).



The purity of Human DLL4 Protein, Fc Tag, premium grade (Flagship) (Cat. No. DL4-H5255) is more than 90% and the molecular weight of this protein is around 160-200 kDa verified by SEC-MALS. [Report](#)

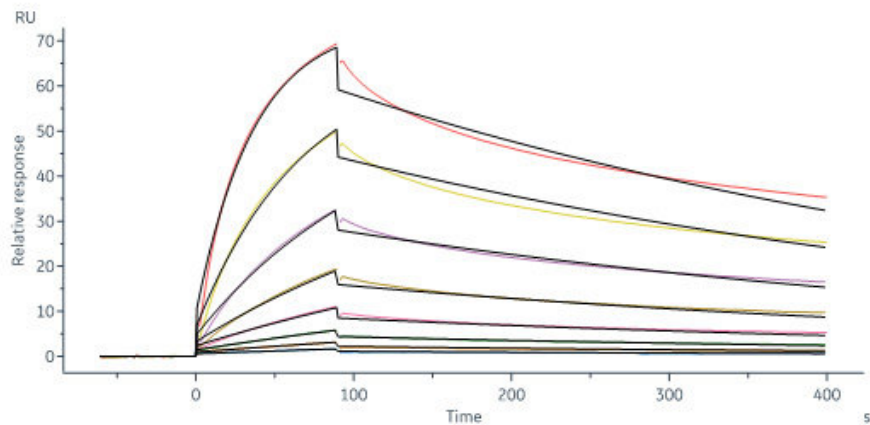
Bioactivity-CELL BASE

Human DLL4 Protein, Fc Tag, premium grade (Flagship) stimulates Human Notch1 (Luc) HeLa Reporter Cell



Human DLL4 Protein, Fc Tag, premium grade (Flagship) (Cat. No. DL4-H5255) stimulates Human Notch1 (Luc) HeLa Reporter Cell. The typical EC50 for this effect is 597 ng/mL (QC tested).

Bioactivity-SPR



Human DLL4 Protein, Fc Tag, premium grade (Flagship) (Cat. No. DL4-H5255) captured on Protein A Chip can bind Human NOTCH1 Protein, His

Discounts, Gifts,
and more!



Human DLL4 Protein, Fc Tag, premium grade (Flagship)

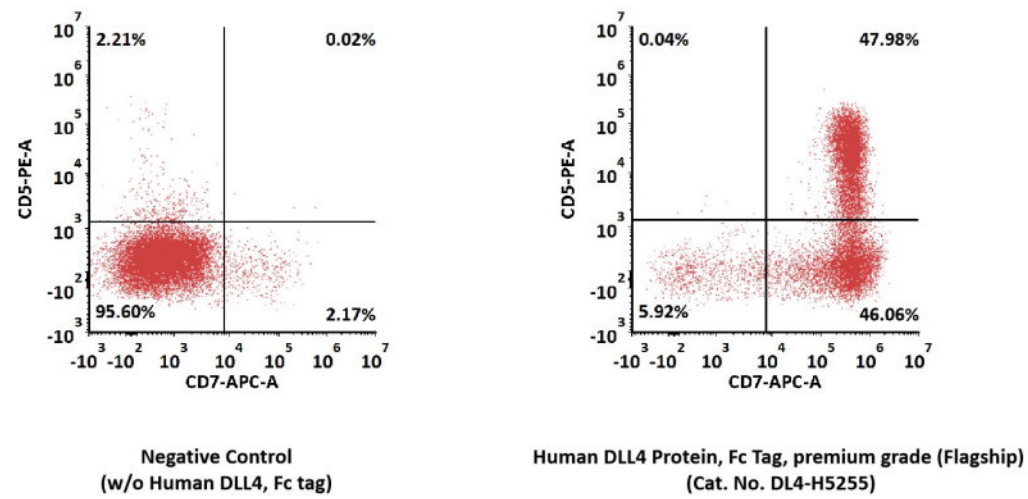
Catalog # DL4-H5255



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).

Application Data

CD7⁺ CD5⁺ T-cell progenitors differentiated from CD34⁺ CD45⁺ hematopoietic cells induced with Human DLL4 Protein, Fc Tag, premium grade (Flagship) (Cat. No.DL4-H5255) in a feeder-free system at 14 days



CD34⁺ CD45⁺ hematopoietic cells were seeded on a Human DLL4 Protein, Fc Tag, premium grade (Flagship) (Cat. No. DL4-H5255) coating plate and differentiated for 14 days, then flow cytometry was used to detect the expression of T-cell progenitor markers, CD7 and CD5, in FSC/SSC_{low} gate. Human DLL4 Protein, Fc Tag, premium grade (Flagship) (Cat. No. DL4-H5255) together with other factors could induce the formation of CD7⁺ and CD7⁺ CD5⁺ T-cell progenitors. However, the cells cultured without Human DLL4 Protein, Fc Tag, premium grade (Flagship) (Cat. No. DL4-H5255) expressed neither CD5 nor CD7 (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.

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