

Synonym

DLL1,Delta1,H-Delta-1

Source

Human DLL1 Protein, His Tag, premium grade(DL1-H52H8) is expressed from human 293 cells (HEK293). It contains AA Gln 18 - Gly 540 (Accession # [NP_005609](#)).

Predicted N-terminus: Gln 18

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

DLL1(Gln 18 - Gly 540)
NP_005609

Poly-his

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

The protein has a calculated MW of 58.4 kDa. The protein migrates as 60-65 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.

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

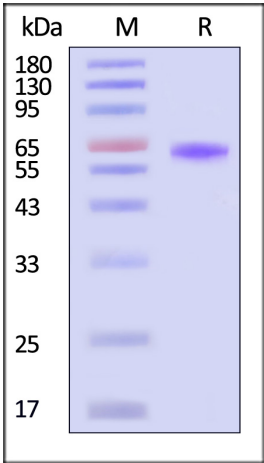
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

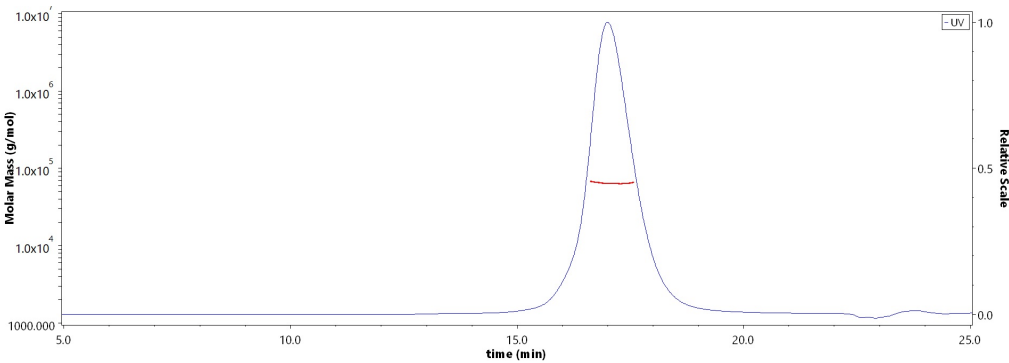
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human DLL1 Protein, His Tag, premium grade 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



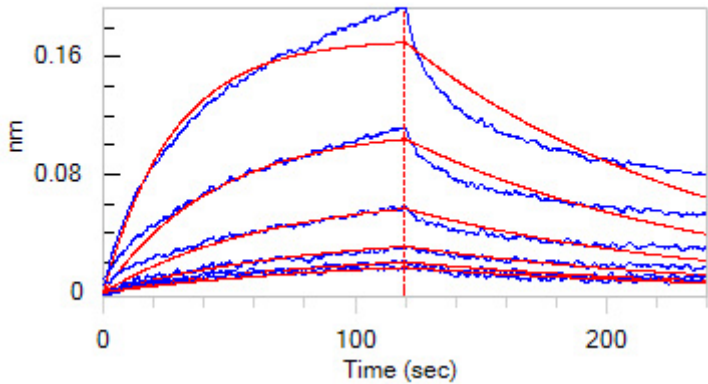
The purity of Human DLL1 Protein, His Tag, premium grade (Cat. No. DL1-H52H8) is more than 90% and the molecular weight of this protein is around 55-75 kDa verified by SEC-MALS.

[Report](#)





Bioactivity-BLI



Loaded Human NOTCH1, Fc Tag (Cat. No. NO1-H5255) on Protein A Biosensor, can bind Human DLL1 Protein, His Tag, premium grade (Cat. No. DL1-H52H8) with an affinity constant of 290 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Background

Delta-like protein 1 (DLL1) is also known as Drosophila Delta homolog 1 (Delta1 or H-Delta-1), which contains one DSL domain and eight EGF-like domains. DLL1 is ubiquitinated by MIB (MIB1 or MIB2), leading to its endocytosis and subsequent degradation. As for expression, DLL1 is expressed in heart and pancreas, with lower expression in brain and muscle and almost no expression in placenta, lung, liver and kidney. Furthermore, DLL1 acts as a ligand for Notch receptors. Also, DLL1 can block the differentiation of progenitor cells into the B-cell lineage while promoting the emergence of a population of cells with the characteristics of a T-cell/NK-cell precursor.

