

Human DLL4 Protein

Cat. No. DLL-HM204



Description

Source	Recombinant Human DLL4 Protein is expressed from HEK293 with hFc tag at the C-Terminus. It contains Ser27-Pro524.
Accession	Q9NR61
Molecular Weight	The protein has a predicted MW of 81.1 kDa. Due to glycosylation, the protein migrates to 82-90 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1EU per μg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

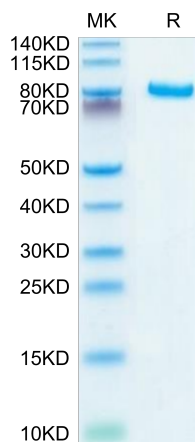
Formulation	Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

Delta-like protein 4 (DLL4) is a type I membrane protein belonging to the Delta/Serrate/Lag2 (DSL) family of Notch ligands. Activates NOTCH1 and NOTCH4. Involved in angiogenesis; negatively regulates endothelial cell proliferation and migration and angiogenic sprouting. Essential for retinal progenitor proliferation. Required for suppressing rod fates in late retinal progenitors as well as for proper generation of other retinal cell types (By similarity). During spinal cord neurogenesis, inhibits V2a interneuron fate.

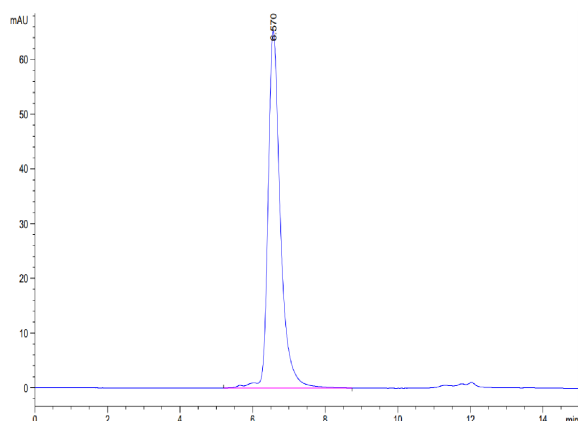
Assay Data

Bis-Tris PAGE



Human DLL4 on Bis-Tris PAGE under reduced conditions. The purity is greater than 95%.

SEC-HPLC



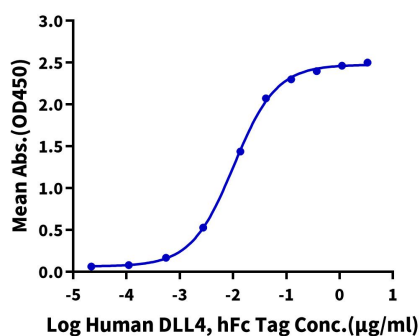
The purity of Human DLL4 is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

Human DLL4, hFc Tag ELISA

0.1µg Human Notch 1, His Tag Per Well

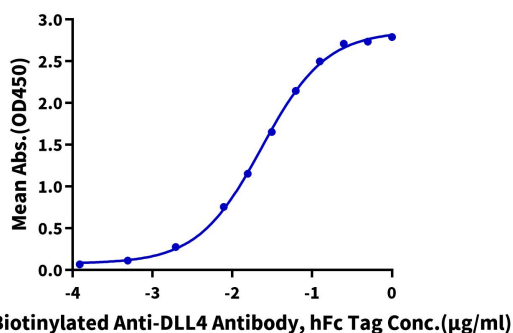


Immobilized Human Notch 1, His Tag at 1µg/ml (100µl/well) on the plate. Dose response curve for Human DLL4, hFc Tag with the EC50 of 10.3ng/ml determined by ELISA (QC Test).

ELISA Data

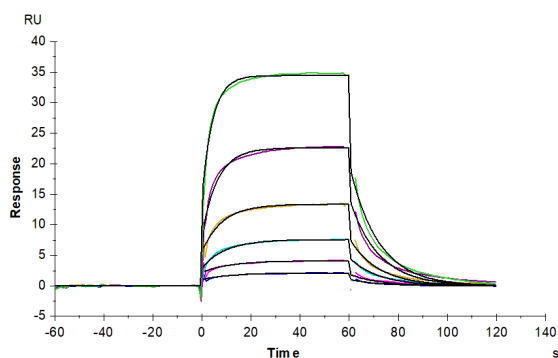
Human DLL4, hFc Tag ELISA

0.1µg Human DLL4, hFc Tag Per Well



Immobilized Human DLL4, hFc Tag at 1µg/ml (100µl/Well) on the plate. Dose response curve for Biotinylated Anti-DLL4 Antibody, hFc Tag with the EC50 of 23.5ng/ml determined by ELISA.

SPR Data



Human DLL4, hFc Tag captured on CM5 Chip via Protein A can bind Human Notch 1, His Tag with an affinity constant of 0.48 µM as determined in SPR assay (Biacore T200).