

# Human DLL1/Delta1 Protein, Ultra Low Endotoxin

Cat. No. DLL-HM101-UL

## Description

<b>Source</b>	Recombinant Human DLL1/Delta1 Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Gln18-Gly540.
<b>Accession</b>	NP_005609
<b>Molecular Weight</b>	The protein has a predicted MW of 57.6 kDa. Due to glycosylation, the protein migrates to 60-70 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 0.01 EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

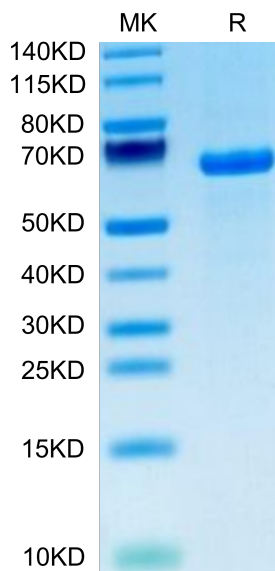
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in 50mM Tris, 150mM NaCl (pH 7.5). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
<b>Storage</b>	-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

DLL1, a Notch signaling ligand, is significantly overexpressed in ERα luminal breast cancer. Intriguingly, DLL1 overexpression correlates with poor prognosis in ERα luminal breast cancer, but not in other subtypes of breast cancer. In addition, this effect is specific to DLL1, as other Notch ligands (DLL3, JAGGED1, and JAGGED2) do not influence the clinical outcome of ERα patients. DLL1-mediated Notch signaling in breast cancer is important for tumor cell proliferation, angiogenesis, and cancer stem cell function.

## Assay Data

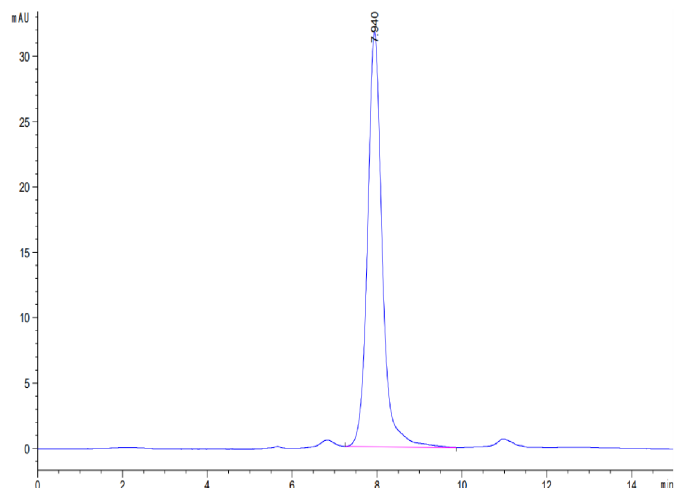
### Bis-Tris PAGE



Human DLL1 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

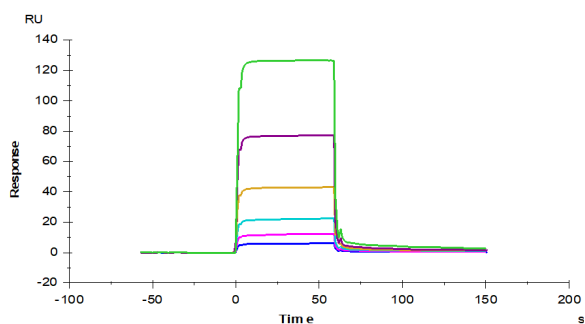
### SEC-HPLC

Assay Data



The purity of Human DLL1 is greater than 95% as determined by SEC-HPLC.

SPR Data



Biotinylated Human Notch 1, His-Avi Tag (Cat. NOT-HM401B) immobilized on CM5 Chip can bind Human DLL1, His Tag with an affinity constant of 7.33  $\mu\text{M}$  as determined in SPR assay (Biacore S200).