

# Human Notch 1 Protein

Cat. No. NOT-HM401

## Description

<b>Source</b>	Recombinant Human Notch 1 Protein is expressed from Expi293 with His tag and Avi tag at the C-terminal. It contains Ala19-Gln526.
<b>Accession</b>	P46531
<b>Molecular Weight</b>	The protein has a predicted MW of 56.5 kDa. Due to glycosylation, the protein migrates to 70-80 kDa based on Tris-Bis PAGE result.
<b>Endotoxin</b>	Less than 1EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

## Formulation and Storage

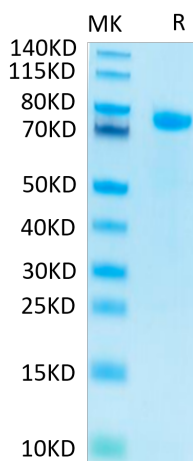
<b>Formulation</b>	Lyophilized from 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4). Normally 5% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge tubes before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended (usually we use 1mg/ml solution for lyophilization). Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please avoid freeze-thaw cycles.

## Background

Human Notch-1 is a 300 kDa type I transmembrane glycoprotein that is one of four human Notch homologues involved in developmental processes. Notch-1 functions as a receptor for membrane-bound ligands Jagged-1 (JAG1), Jagged-2 (JAG2) and Delta-1 (DLL1) to regulate cell-fate determination. Upon ligand activation through the released notch intracellular domain (NICD) it forms a transcriptional activator complex with RBPJ/RBPSUH and activates genes of the enhancer of split locus. Affects the implementation of differentiation, proliferation and apoptotic programs.

## Assay Data

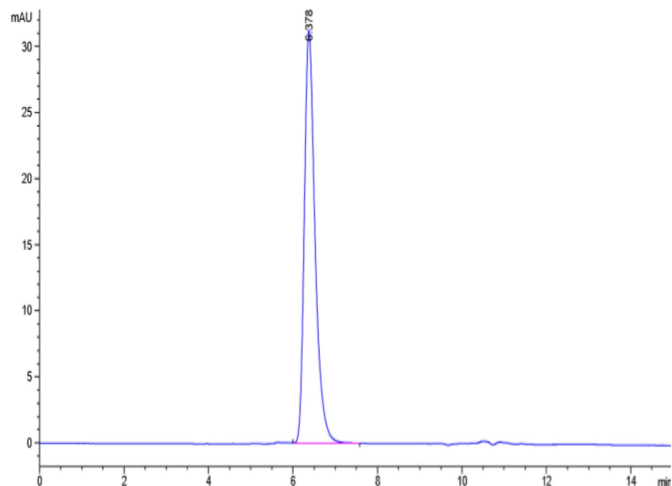
### Tris-Bis PAGE



Human Notch 1 on Tris-Bis PAGE under reduced conditions. The purity is greater than 95%.

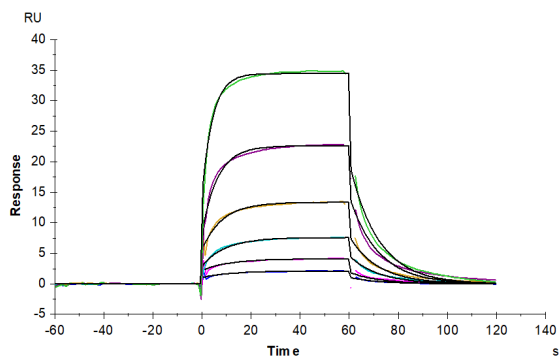
### SEC-HPLC

Assay Data



The purity of Human Notch 1 is greater than 95% as determined by SEC-HPLC.

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  $\mu\text{M}$  as determined in SPR assay (Biacore T200).