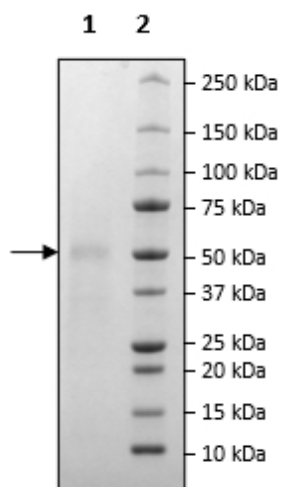


## Product Information

<b>Description:</b>	Recombinant human Notch3, encompassing amino acids 40-467. This construct contains a C-terminal Avi-Tag™, followed by an His-Tag (6xHis). This protein was affinity purified.
<b>Background:</b>	The Notch (neurogenic locus notch homolog protein) signaling pathway controls cell fate decisions in vertebrates and invertebrates and is involved in embryonic development, tissue homeostasis, and regulation of the immune and angiogenic systems. Notch signaling is triggered through the binding of a transmembrane ligand, present in opposing cells, to one of the four existing Notch transmembrane receptors (Notch1/Notch2/Notch3/Notch4). This results in proteolytic cleavage of the Notch receptor, releasing the constitutively active intracellular domain of the Notch receptor (NICD). NICD translocate to the nucleus and associates with the transcription factor CSL (CBF1/RBPJκ/Suppressor of Hairless/Lag-1) and coactivator Mastermind to turn on the transcription of Notch-responsive genes. Dysfunction of Notch signaling has severe consequences, including developmental pathologies or cancer (such as T cell acute lymphoblastic leukemia, T-ALL, and urothelial bladder cancer). The use of Notch inhibitors, mainly gamma secretase inhibitors, as a cancer therapy option and in the regeneration of tissues is under investigation. Further studies will allow us to have a deeper understanding of Notch signaling and will benefit future therapeutic approaches.
<b>Species:</b>	Human
<b>Construct:</b>	Notch3 (40-467-Avi-His)
<b>Concentration:</b>	0.12 mg/ml
<b>Expression System:</b>	HEK293
<b>Purity:</b>	≥90%
<b>Format:</b>	Aqueous buffer solution.
<b>Formulated In:</b>	8 mM phosphate, pH 7.4, 110 mM NaCl, 2.2 mM KCl, and 20% glycerol
<b>MW:</b>	48 kDa
<b>Genbank Accession:</b>	NM_000435.3
<b>Stability:</b>	At least 6 months at -80°C.
<b>Storage:</b>	-80°C
<b>Instructions for Use:</b>	Thaw on ice and gently mix prior to use. DO NOT VORTEX. Perform a quick spin before opening. Aliquot into small volumes and flash freeze for long term storage. Avoid multiple freeze/thaw cycles.
<b>Assay Conditions:</b>	The protein was validated by measuring Anti-Notch Neutralizing Antibody (#102065) binding to Notch3 by ELISA. Notch3 Avi-Tag, His-Tag Recombinant (#101992) was coated onto a 96-well plate overnight at 4°C (50 µl/well at a concentration of 2 µg/ml in PBS). The plate was washed 3 times with Immuno Buffer 1 (#79311) and blocked using 100 µl of Blocking Buffer 2 (#79728) for 1 hour at Room Temperature (RT). After removing the blocking buffer, 50 µl/well of purified Anti-Notch Neutralizing Antibody (#102065), serially diluted in Blocking Buffer 2, was added for 1 hour at RT. After 3 more washes, the plate was incubated with anti-human IgG Fc-HRP, washed, and incubated with the Colorimetric HRP substrate. The reaction was stopped, and absorbance was read at 450 nm. The Blank value was subtracted from all values.
<b>Applications:</b>	Useful for Notch3 binding studies using ELISA and in cellular assays.

## Quality Control Data

### 4-20% SDS-PAGE Coomassie Staining



### Notch3:Anti Notch Binding Assay

