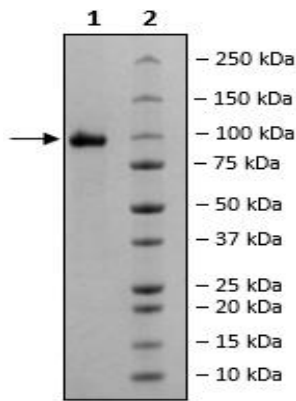


Product Information

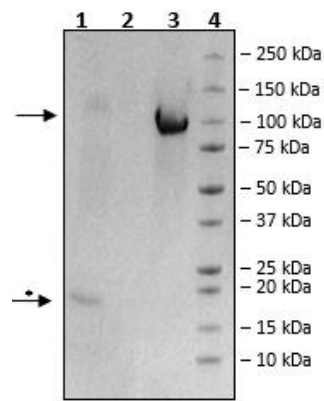
Description:	Recombinant human Notch2 (neurogenic locus notch homolog protein 2), encompassing amino acids 26-530 (extracellular domain). This construct contains a C-terminal Fc domain from human IgG1 followed by an Avi-tag™. This protein was affinity purified.
Background:	Notch2 (neurogenic locus notch homolog protein 2) is a type I transmembrane protein of the Notch family. It is involved in the development of the vascular network, brain, kidneys, liver, T and B lymphocytes. The protein undergoes cleavage in the trans-golgi network, forming a heterodimer. Binding of Notch2 to its ligands of the Delta/Serrate/LAG-2 family leads to its cleavage by ADAM (A disintegrin and metalloprotease) proteins. NICD (notch intracellular domain) is released and translocated to the nucleus, where it can form complexes with DNA-binding proteins and lead to transcription of target genes. Mutations in this protein can result in Hadju-Cheney syndrome. Overexpression of Notch2 is found in several cancer types, such as LSCC (laryngeal squamous cell carcinoma) and B cell malignancies. The use of inhibitors to target this protein is being studied with the goal of understanding better the role of this protein and potentially target it in cancer therapy.
Species:	Human
Construct:	Notch2 (26-530-Fc(IgG1)-Avi)-(Biotin)
Concentration:	0.36 mg/ml
Expression System:	HEK293
Purity:	≥90%
Format:	Aqueous buffer solution.
Formulated In:	8 mM phosphate, pH 7.4, 110 mM NaCl, 2.2 mM KCl, and 20% glycerol
MW:	83 kDa + glycans
Glycosylation:	This protein runs at a higher MW by SDS-PAGE due to glycosylation.
Genbank Accession:	NM_024408.4
Label:	This protein is enzymatically biotinylated using Avi-Tag™ technology. Biotinylation is confirmed to be ≥90%.
Stability:	At least 6 months at -80°C.
Storage:	-80°C
Instructions for Use:	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.
Assay Conditions:	The protein was validated by measuring Notch2 binding to anti-Notch in an ELISA assay. Anti-Notch Antibody (#102065) 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 serially diluted Notch2, Fc Fusion, Avi-Tag, Biotin-Labeled Recombinant (#101987) in Blocking Buffer 2, was added for 1 hour at RT. After 3 washes, the plate was incubated with Streptavidin-HRP (#79742). This was followed by washing and incubation with Colorimetric HRP substrate. The reaction was stopped, and absorbance was read at λ= 450 nm. The Blank value was subtracted from all values.
Applications:	Useful for studying the binding of Notch2 in ELISA and in cellular assays.

Quality Control Data

4-20% SDS-PAGE Coomassie Staining



Biotin-Avidin Pulldown



1. Beads
2. Flow Thru
3. Control
4. Standards

* Avidin from beads.

Anti Notch:Notch2-Biotin Binding Assay

