

Product Information

Description:	Recombinant human Notch1, encompassing amino acids 19-526 (extracellular domain). This construct contains a human IgG1 Fc domain fused at the C-terminal, followed by an Avi-tag™. This protein was affinity purified.
Background:	The Notch signaling pathway controls cell fate decisions in vertebrates and invertebrates' tissues 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/RBPJK/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 ongoing. Further studies will allow us to have a deeper understanding of Notch signaling and will benefit future therapeutic approaches.
Species:	Human
Construct:	Notch1 (19-526-Fc(IgG1)-Avi)
Concentration:	0.41 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:	82 kDa + glycans
Glycosylation:	This protein runs at a higher MW by SDS-PAGE due to glycosylation.
Genbank Accession:	NM_017617.5
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.
Applications:	Useful for SDS-PAGE.

Quality Control Data

4-20% SDS-PAGE Coomassie Staining

