NOTCH1 Protein, Human (HEK293, His-Avi)

Cat. No.:	HY-P78501
Synonyms:	Notch-1; TAN1; NOTCH1; 9930111A19Rik; lin-12; Mis6; N1
Species:	Human
Source:	HEK293
Accession:	P46531 (A19-Q526)
Gene ID:	4851
Molecular Weight:	70-80 kDa

PROPERTIES

Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4. Normally 5% trehalose is added as protectant before lyophilization.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	NOTCH1 protein serves as a receptor for membrane-bound ligands, including Jagged-1 (JAG1), Jagged-2 (JAG2), and Delta-1 (DLL1), exerting critical regulatory functions in cell-fate determination. Upon ligand activation, the released Notch intracellular domain (NICD) forms a transcriptional activator complex with RBPJ/RBPSUH, orchestrating the activation of genes within the enhancer of split locus. NOTCH1 significantly influences cellular differentiation, proliferation, and apoptotic programs. Beyond its role in angiogenesis, where it negatively regulates endothelial cell proliferation and migration, NOTCH1 is involved in thymic maturation, follicular differentiation, and cell fate selection within the follicle. Additionally, it plays a crucial role in cerebellar development by acting as a receptor for neuronal DNER, contributing to the differentiation of Bergmann glia. NOTCH1 also plays roles in postimplantation development, mesoderm development, somite formation, and neurogenesis. It interacts with various proteins, including DNER, DTX1, DTX2, RBPJ/RBPSUH, MAML1, MAML2, MAML3, SNW1, AAK1, FBXW7, SGK1, HIF1AN, SNAI1, MDM2A, BCL6, THBS4, CCN3, DLL4, ZMIZ1, MEGF10, PRAG1, PSEN1, and ZFP64, forming a complex network that modulates diverse cellular processes and regulatory pathways.

Caution: Product has not been fully validated for medical applications. For research use only.

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