

NOTCH1 Protein, Human (HEK293, Fc)

Cat. No.:	HY-P73742
Synonyms:	Neurogenic locus notch homolog protein 1; Notch 1; Motch A; mT14
Species:	Human
Source:	HEK293
Accession:	P46531/NP_060087.3 (A19-Q526)
Gene ID:	4851
Molecular Weight:	Approximately 79.7 kDa

PROPERTIES

AA Sequence

ARGPRCSQPG	ETCLNGGKCE	AANGTEACVC	GGAFVGP RCQ
DPNPC LSTPC	KNAGTCHVVD	RRGVADYACS	CALGFSGPLC
LTP LDNACL T	NPCRNGGTC D	L LTLTEYKCR	CPPGWSGKSC
QQADPCASNP	CANGGQCLPF	EASYICHCPP	SFHGPTCRQD
VNECGQK PGL	CRHGGTCHNE	VGSYRCVCRA	THTGPNCERP
YVPCSPSPCQ	NGGTCRPTGD	VTHECACLPG	FTGQNC EENI
DDCPGN NCKN	GGACVDGVNT	YNCRC PPEWT	GQYCTEDVDE
CQLMPNACQN	GGTCHNTHGG	YNCVCVNGWT	GEDCSENI DD
CASAACFHGA	TCHDRVASFY	CECPHGRTGL	LCHLNDACIS
NPCNEGSNCD	TNPVNGKAIC	TCPSGYTGPA	CSQDVDECSL
GANPCEHAGK	CINTLGSFEC	QCLQGYTGPR	CEIDVNECVS
NPCQNDATCL	DQIGEFQCIC	MPGYEGVHCE	VNTDECASSP
CLHNGRCLDK	INEFQCECPT	GFTGHLCQ	

Biological Activity Immobilized Recombinant DLL4 Protein at 5 µg/mL (100 µL/well) can bind Biotinylated Recombinant Human NOTCH1 Protein. The ED₅₀ for this effect is 0.1495 µg/mL.

Appearance Lyophilized powder

Formulation Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.

Endotoxin Level <1 EU/µg, determined by LAL method.

Reconstitution It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH₂O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).

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.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA