

# Product Data Sheet

## NOTCH1 Protein, Mouse (sf9, His)

Cat. No.:	HY-P73324		
Synonyms:	Neurogenic locus notch homolog protein 1; Notch 1; Motch A; mT14		
Species:	Mouse		
Source:	Sf9 insect cells		
Accession:	Q01705 (A19-Q526)		
Gene ID:	18128		
Molecular Weight:	Approximately 80 kDa		

### PROPERTIES

AA Soquence						
AA Sequence	ARGLRCSQPS	GTCLNGGRCE	VANGTEACVC	SGAFVGQRCQ		
	DSNPCLSTPC	KNAGTCHVVD	HGGTVDYACS	CPLGFSGPLC		
	LTPLDNACLA	NPCRNGGTCD	LLTLTEYKCR	CPPGWSGKSC		
	QQADPCASNP	CANGGQCLPF	ESSYICRCPP	G F H G P T C R Q D		
	VNECSQNPGL	С R H G G T C H N E	IGSYRCACRA	ТНТ БРНСЕ L Р		
	Y V P C S P S P C Q	NGGTCRPTGD	ТТНЕСАСLPG	FAGQNCEENV		
	D	GGACVDGVNT	YNCRCPPEWT	GQYCTEDVDE		
	CQLMPNACQN	G G T C H N T H G G	YNCVCVNGWT	GEDCSENIDD		
	CASAACFQGA	T C H D R V A S F Y	CECPHGRTGL	LCHLNDACIS		
	NPCNEGSNCD	ΤΝΡΥΝGΚΑΙΟ	ТСРЅGҮТGPА	CSQDVDECAL		
	GANPCEHAGK	CLNTLGSFEC	QCLQGYTGPR	CEIDVNECIS		
	NPCQNDATCL	DQIGEFQCIC	MPGYEGVYCE	INTDECASSP		
	СLHNGHCMDK	INEFQCQCPK	GFNGHLCQ			
Appearance	Lyophilized powder.					
Formulation	Lyophilized from a 0.2 μm filtered solution of 20 mM Tris, 500 mM NaCl, pH 7.4, 10% Glycerol. Normally 5 % - 8 % trehalose mannitol and 0.01% Tween 80 are added as protectants before lyophilization.					
Endotoxin Level	<1 EU/µg, determined by LAL method.					
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 $\mu\text{g}/\text{mL}$ in ddH2O.					
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 functions as a receptor for membrane-bound ligands, including Jagged-1 (JAG1), Jagged-2 (JAG2), and Delta-1 (DLL1), playing a crucial role in cell-fate determination. Upon ligand activation, the released Notch intracellular domain (NICD) forms a transcriptional activator complex with RBPJ/RBPSUH, activating genes in the enhancer of split locus and influencing differentiation, proliferation, and apoptosis. NOTCH1 is involved in angiogenesis, negatively regulating endothelial cell proliferation, migration, and angiogenic sprouting. It contributes to thymic maturation of CD4(+) and CD8(+) cells, follicular differentiation, and possibly cell fate selection within the follicle. In cerebellar development, it serves as a receptor for neuronal DNER, impacting the differentiation of Bergmann glia. NOTCH1 also plays roles in repressing neuronal and myogenic differentiation, postimplantation development, mesoderm development, somite formation, and neurogenesis. Additionally, it modulates the balance between motile and immotile cilia for left/right symmetry determination. The protein interacts with various partners, including DNER, DTX1, DTX2, RBPJ/RBPSUH, MAML1, MAML2, MAML3, SNW1, AAK1, FBXW7, SGK1, HIF1AN, SNAI1, MDM2A, BCL6, THBS4, CCN3, DLL4, ZMIZ1, MEGF10, DLL1, JAG1, PRAG1, PSEN1, and ZFP64, highlighting its involvement in intricate signaling networks and regulatory processes.

#### 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