NOTCH2 Protein, Human (Biotinylated, HEK293, His-Avi)

Cat. No.:	HY-P78185
Synonyms:	AGS2; Notch-2; NOTCH2; N2ECD; HJCYS; N2
Species:	Human
Source:	HEK293
Accession:	Q04721 (L26-Q530)
Gene ID:	4853
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	NOTCH2 protein functions as a receptor for membrane-bound ligands, including Jagged-1 (JAG1), Jagged-2 (JAG2), and Delta-1 (DLL1), playing a pivotal role in regulating cell-fate determination. Upon ligand activation, NOTCH2 undergoes cleavage, releasing the Notch intracellular domain (NICD), which forms a transcriptional activator complex with RBPJ/RBPSUH and activates genes within the enhancer of split locus. This activation influences cellular differentiation, proliferation, and apoptotic programs. NOTCH2 is implicated in bone remodeling and homeostasis, collaborating with RELA/p65 to enhance NFATc1 promoter activity and positively regulate RANKL-induced osteoclast differentiation. Additionally, it positively regulates self-renewal in liver cancer cells. NOTCH2 exists as a heterodimer composed of a C-terminal fragment (N(TM)) and an N-terminal fragment (N(EC)), likely linked by disulfide bonds. It interacts with various proteins, including transcriptional coactivators MAML1, MAML2, and MAML3, as well as factors such as HIF1AN, TCIM, and FBXW7, implicating its involvement in diverse cellular processes and regulatory pathways. Interactions with MINAR1, NOTCH2NL, MDK, and MINAR2 further contribute to the intricate network of NOTCH2 signaling.

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

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