



Recombinant Human DLL-4, soluble

20201029BB



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	S01-051
Size:	25 µg
Lot. No.:	According to product label

Scientific Background

Gene-ID (NCBI):	54567
Synonyms:	DLL4; hdelta2

Human sDLL4 comprises the extracellular signaling domain of DLL, a member of a structurally-related family of single-pass type I transmembrane proteins that serve as ligands for Notch receptors. DLL4 functions to specifically activate the Notch-1 and Notch-4 receptors. The Notch signaling pathway regulates endothelial-cell differentiation, proliferation and apoptosis, and is essential for the development, maintenance and remodeling of the vascular system. Targeted deletion of the DLL4 gene in mice resulted in severe vascular defects and death before birth. Up-regulation of DLL4 expression has been implicated in the vascular development of certain tumors. Recombinant human sDLL4 is a 54.0 kDa glycoprotein containing 498 amino-acid residues.

Sequence

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SGVFQLQLQE FINERGVLAS GRPCEPGCRT FFRVCLKHFQ
AVVSPGPCTF GTVSTPVLGT NSFVAVRDDSS GGRNPLQLP
FNFTWPGTFS LIIEAWHAPG DLLRPEALPP DALISKIAIQ
GSLAVGQNLW LDEQTSSTLR LRSYRVICS DNYYGDNCSR
LCKKRNDHFG HYVCQPDGNL SCLPGWTGEY CQQPICLSGC
HEQNGYCSKP AECLCRPGWQ GRLCNECIPH NGCRHGTCST
PWQCTCDEGW GGLFCDQDLN YCTHHSFCKN GATCSNSGQR
SYTCTCRPGY TGVDCELELS ECDSNPCRNG GSKDQEDGY
HCLCPPGYG LHCEHSTLSC ADSPCFNGGS CRERNQGANY
ACECPPNFTG SNCEKKVDRS TSNPCANGGQ CLNRGP SRMC
RCRPGFTGTY CELHVSDCAR NPCAHGGTCH DLNGLMCTC
PAGFSGRRCR VRTSIDACAS SPCFNRATCY TDLSTDTFVC
NCPYGFVGSR CEFPVGLP

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Database References

Protein RefSeq:	NP_061947
Uniprot ID:	Q9NR61
mRNA RefSeq:	NM_019074

Product Specifications

Expressed in	HEK 293 cells
Purity	> 95% by SDS-PAGE & HPLC analyses
Endotoxin level	< 0.1 ng /µg of protein (<1EU/µg).
Formulation	Lyophilized from 1X PBS, pH 7.5
Length (aa):	498
MW:	~54 kDa (calculated)

Stability: The lyophilized protein is stable at room temperature for 1 month and at 4°C for 3 months. Reconstituted working aliquots are stable for 1 week at 2°C to 8°C and for 3 months at -20°C to -80°C.

Reconstitution: Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. *Do not vortex.* This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.



AVOID REPEATED FREEZE AND THAW CYCLES!

Biological Activity: The sDLL-4, when immobilized at concentrations >1.5 µg/mL will inhibit myogenesis in C2C12 cells.