

# sDLL-4, Human CellExp™, Human Recombinant

|                            |  |                |
|----------------------------|--|----------------|
| <b>CATALOG #:</b>          | 7134-10<br>7134-50   | 10 µg<br>50 µg |
| <b>ALTERNATE NAMES:</b>    | Delta-like protein 4; Drosophila Delta homolog 4   |                |
| <b>SOURCE:</b>             | HEK293 cells   |                |
| <b>PURITY:</b>             | ≥ 95% by SDS-PAGE gel and HPLC analyses  |                |
| <b>MOL. WEIGHT:</b>        | 54.3 kDa   |                |
| <b>ENDOTOXIN LEVEL:</b>    | < 0.1 ng/µg of protein (<1EU/µg).  |                |
| <b>FORM:</b>               | Lyophilized  |                |
| <b>FORMULATION:</b>        | Sterile filtered through a 0.2 micron filter.<br>Lyophilized from 1X PBS, pH 7.5.                                      |                |
| <b>STORAGE CONDITIONS:</b> | Store at -20°C. After reconstitution, aliquot and store at -20°C to -80°C. Avoid repeated freezing and thawing cycles. |                |

## 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.

## DESCRIPTION:

Human sDLL4 comprises the extracellular signaling domain of DLL, a member of a structurally-related family of single-pass type I trans-membrane 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 54.3 kDa glycoprotein containing 498 amino-acid residues.

## BIOLOGICAL ACTIVITY:

The sDLL-4, when immobilized at concentrations > 1.5 µg/mL will inhibit myogenesis in C<sub>2</sub>C<sub>12</sub> cells.

## AMINO ACID SEQUENCE:

```
SGVFQLQLQE  FINERGVLAS  GRPCEPGCRT  FFRVCLKHFQ  AVVSPGPCTF
GTVSTPVLGT  NSFVRDDSS  GGGRNPLQLP  FNFTWPGTFS  LIIEAWHAPG
DDLRLPEALPP  DALISKIAIQ  GSLAVGQNWL  LDEQTSTLTR  LRSYRVICS
DNYYGDNCSR  LCKKRNDHFG  HYVCQPDGNL  SCLPGWTGEY  CQQPICLSGC
HEQNGYCSKP  AECLCRPGWQ  GRLCNECIPH  NGCRHGTCT  PWQCTCDEGW
GGLFCDQDLN  YCTHHSPCKN  GATCSNSGQR  SYTCTCRPGY  TGVDCELELS
ECDSNPCRNG  GSCKDQEDGY  HCLCPPGYG  LHCEHSTLSC  ADSPCFNGGS
CRERNQGANY  ACECPPNFTG  SNCEKKVDRC  TSNPCANGGQ  CLNRGPSRMC
RCRPGFTGTY  CELHVSDCAR  NPCAHGGTCH  DLENGLMCTC  PAGFSGRRCE
VRTSIDACAS  SPCFNRATCY  TDLSTDTFVC  NCPYGFVGSR  CEFVGLP
```

## RELATED PRODUCTS:

- sDLL-1, human recombinant (**Cat. No. 7133-10, -50**)
- Notch 1 Antibody (**Cat. No. 3881-100**)
- Notch 1 Blocking Peptide (**Cat. No. 3881BP-50**)

**FOR RESEARCH USE ONLY! Not to be used in humans.**