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# sDLL-1, Human CellExp™, Human Recombinant

**CATALOG #**: 7133-10 10 μg

7133-50 50 μg

ALTERNATE NAMES: Delta-like protein 1, Delta-1

SOURCE: HEK293 cells

**PURITY:** ≥ 95% by SDS-PAGE gel and HPLC analyses

MOL. WEIGHT: 57-60 kDa

**ENDOTOXIN LEVEL:** < 0.1 ng/μg of protein (<1EU/μg).

FORM: Lyophilized

**FORMULATION:** Sterile filtered through a 0.2 micron filter.

Lyophilized from 1X PBS, pH 7.5.

**STORAGE CONDITIONS:** 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 sDLL-1 comprises the extracellular signaling domain of DLL-1, a member of a structurally-related family of single-pass type I trans-membrane proteins that serve as ligands for Notch receptors. It is expressed in the heart and pancreas, and to a lesser extent in various other tissues. DLL-1 functions to specifically activate the Notch-1 and Notch-2 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. DLL-1 suppresses differentiation of hematopoietic progenitor cells into the B-cell lineage while promoting differentiation to T-cell and NK cell

precursors. Recombinant human sDLL-1 is a 57.0-60.0 kDa glycoprotein containing 522 amino-acid residues.

## **BIOLOGICAL ACTIVITY:**

Determined by the dose dependent growth suppression of the human acute monocytic leukemia cell line, THP-1.

sDLL-1 inhibits the proliferation in THP-1 cells using a concentration of 3.0-5.0 μg/ml.

#### AMINO ACID SEQUENCE:

SGVFELKLQE	FVNKKGLLGN	RNCCRGGAGP	PPCACRTFFR	VCLKHYQASV
SPEPPCTYGS	AVTPVLGVDS	FSLPDGGGAD	SAFSNPIRFP	<b>FGFTWPGTFS</b>
LIIEALHTDS	PDDLATENPE	RLISRLATQR	HLTVGEEWSQ	DLHSSGRTDL
KYSYRFVCDE	HYYGEGCSVF	CRPRDDAFGH	FTCGERGEKV	CNPGWKGPYC
TEPICLPGCD	EQHGFCDKPG	ECKCRVGWQG	RYCDECIRYP	GCLHGTCQQP
WQCNCQEGW	G GLFCNQDLNY	CTHHKPCKNG	ATCTNTGQGS	YTCSCRPGYT
GATCELGIDE	CDPSPCKNGG	SCTDLENSYS	CTCPPGFYGK	ICELSAMTCA
DGPCFNGGRC	SDSPDGGYSC	RCPVGYSGFN	CEKKIDYCSS	SPCSNGAKCV
DLGDAYLCRC	QAGFSGRHCD	DNVDDCASSP	CANGGTCRDG	VNDFSCTCPP
GYTGRNCSAP	VSRCEHAPCH	NGATCHERGH	RYVCECARGY	GGPNCQFLLP
FI PPGPAVVD I	TEKLEGOGG PE			

## **RELATED PRODUCTS:**

- sDLL-4, human recombinant (Cat. No. 7134-10, -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.

