

## TECHNICAL DATA SHEET

# Recombinant Human sDLL-1 (Carrier-free)

Catalog Number: 21-7176

## RPx-Pro™ Recombinant Protein PRODUCT INFORMATION

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Recombinant Human sDLL-1 (Carrier-free)

### DESCRIPTION

Delta-like protein 1 (DLL-1) is a type I transmembrane protein that belongs to the Delta/Serrate/Lag-2 (DSL) family of Notch ligands. Upon proteolytic cleavage of DLL-1, the secreted extracellular domain activates the Notch-1 and Notch-2 receptors of adjacent cells. DLL-1 is widely expressed, primarily in the heart, pancreas and epidermis with lower expression in brain and muscle. DLL-1 mediated notch signaling is required for embryonic development as well the maintenance of adult stem cells. In the immune system DLL-1 promotes development of T-cell/NK-cell precursor cells by blocking the differentiation of progenitor cells into the B-cell lineage. Human sDLL-1 has been shown to suppress apoptosis and promote hematopoietic progenitor cells expansion in cell culture. Human sDLL-1 allows monocyte differentiation into dendritic cells but blocks monocyte differentiation into macrophages.

### MOLECULAR MASS

Recombinant Human sDLL-1 is the 56.3 kDa soluble extracellular signaling domain of the DLL-1 protein.

### AMINO ACID SEQUENCE

SGVFELKLQE FVNKKGLLGN RNCCRGGAGP PPCACRTFFR VCLKHYQASV SPEPPCTYGS AVTPVLGVDS FSLPDGGGAD SAFSNPIRFP  
FGFTWPGTFS LIIEALHTDS PDDLATENPE RLISRLATQR HLTVGEEWSQ DLHSSGRTDL KYSYRFVCD EHYGEGCSVF CRPRDDAFGH FTCGERGEKV  
CNPGWKGPYC TEPICLPGCD EQHGFCDKPG ECKCRVWQGG RYCDECIRYP GCLHGTCQQP WQCNCQEGWG

### SOURCE

HEK293 cells

### APPLICATIONS

Bioassay

### PURITY

95 %

### STORAGE

-20°C

### PROTEIN CONTENT

Content Verified by UV Spectroscopy and/or SDS-PAGE gel.

### ENDOTOXIN LEVEL

Endotoxin level is <0.1 ng/μg of protein (<1EU/μg).

### AUTHENTICITY

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

### CROSS REACTIVITY

N/A

### BIOACTIVITY

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.

### RESEARCH AREAS

Angiogenesis & Cardiovascular, Cancer, Proliferation

### RECONSTITUTION

See Certificate of Analysis (COA) for lot specific reconstitution information.

### REFERENCES

Sukarawan W, Peetiakarawach K, Pavasant P and Osathanon T. 2016. Arch Oral Biol. 65:1-8. Deng Z, Shen J, Ye J, Shu Q, Zhao J, Fang M and Zhang T. 2015. Cell Biochem Biophys. 71(1):331-5.

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