

**TECHNICAL DATA SHEET**

**Recombinant Human EGF-L7 (Carrier-free)**

Catalog Number: 21-7181

**RPx-Pro™ Recombinant Protein**  
**PRODUCT INFORMATION**

**CONTENTS**

Recombinant Human EGF-L7 (Carrier-free)

**DESCRIPTION**

EGF-L7 also known as VE-Statin (vascular endothelia cell statin) is a secreted glycoprotein belonging to the family of EGF-like domain-containing proteins. EGF-L7 is a multi-domain protein containing two EGF-like domains and one EMI domain. Almost exclusively expressed in endothelial cells, it is commonly used as an early marker of embryonic endothelial cells. In adult endothelial cells, although downregulated, it is still detectable in blood vessels of lung, heart and kidney. EGF-L7's primary function is to promote normal development of the vascular system, particularly tubulogenesis. An up-regulation of EGF-L7 is observed in endothelial cells during vascular remodeling tissues, such as regenerating endothelium of the artery and atherosclerotic plaques. EGF-L7 interacts with Notch receptors and overexpression has been shown to inhibit the Notch pathway in HUVEC and neural stem cells. In HCAEC (human coronary artery endothelial cells), EGF-L7 inhibits hypoxia/re-oxygenation, ICAM-1 expression, NF-κB nuclear translocation and decrease of IκBα expression. Additionally, EGF-L7 can chemoattract endothelial cells and bind to the extracellular matrix. Overexpression of EGF-L7 is generally correlated with increased metastasis and a poor prognosis in growing tumors.

**MOLECULAR MASS**

Recombinant Human EGF-L7 is a 27.4 kDa protein containing 251 amino acid residues.

**AMINO ACID SEQUENCE**

MYRPGRRVCA VRAHGDPVSE SFVQRVYQPF LTTCDGHRAC STYRTIYRTA YRRSPGLAPA RPRYACCPGW KRTSGLPGAC GAAICQPPCR  
 NGGSCVQPGRCRCPAGWRGD TCQSDVDECS ARRGGCPQRC VNTAGSYWCQ CWEGHLSLAD GTLCVPGKGGP PRVAPNPTGV DSAMKEEVQR  
 LQSRVDLLEE KLQLVLAPLH SLASQALEHG LPDPGSLLVH SFQQLGRIDS LSEQISFLEE QLGSCSCKKD S

**SOURCE**

E.coli

**APPLICATIONS**

Bioassay

**PURITY**

98 %

**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**

Data Not Available.

**RESEARCH AREAS**

Angiogenesis & Cardiovascular, Cancer, Chemotaxis, Inflammation, Stem Cells & Differentiation

**RECONSTITUTION**

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

**REFERENCES**

Massimiani M, Salvi S, Piccirilli D, Vecchione L, Moresi S, Ferrazzani S, Stuhlmann H and Campagnolo L. 2016. J Matern Fetal Neonatal Med. (sup2):4.  
 Deng QJ, Xie LQ and Li H. 2016. Life Sci. 157:38-44.

Citations are provided as a resource for additional applications that have not been validated by Tonbo Biosciences. Please choose the appropriate format for each application and consult Materials and Methods sections for additional details about the use of any product in these publications.

For Research Use Only.

Not for use in diagnostic or therapeutic procedures. Not for resale. Not for distribution without written consent. Tonbo Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Tonbo Biosciences, Tonbo Biosciences Logo and all other trademarks are the property of Tonbo Biotechnologies Corporation. © 2013 Tonbo Biosciences.