





# Recombinant Mouse CCN family member 1 (Ccn1)

<b>Product Code</b>	CSB-EP006463MO
Relevance	Promotes cell proliferation, chemotaxis, angiogenesis and cell adhesion. Appears to play a role in wound healing by up-regulating, in skin fibroblasts, the expression of a number of genes involved in angiogenesis, inflammation and matrix remodeling including VEGA-A, VEGA-C, MMP1, MMP3, TIMP1, uPA, PAI-1 and integrins alpha-3 and alpha-5. CYR61-mediated gene regulation is dependent on heparin-binding. Down-regulates the expression of alpha-1 and alpha-2 subunits of collagen type-1. Promotes cell adhesion and adhesive signaling through integrin alpha-6/beta-1, cell migration through integrin alpha-1/beta-5 and cell proliferation through integrin alpha-v/beta-3
Abbreviation	Recombinant Mouse Cyr61 protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P18406
Storage Buffer	Tris-based buffer,50% glycerol
<b>Product Type</b>	Recombinant Proteins
Immunogen Species	Mus musculus (Mouse)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	TCPAACHCPLEAPKCAPGVGLVRDGCGCCKVCAKQLNEDCSKTQPCDHTKG LECNFGASSTALKGICRAQSEGRPCEYNSRIYQNGESFQPNCKHQCTCIDGAV GCIPLCPQELSLPNLGCPNPRLVKVSGQCCEEWVCDEDSIKDSLDDQDDLLGL DASEVELTRNNELIAIGKGSSLKRLPVFGTEPRVLFNPLHAHGQKCIVQTTSWS QCSKSCGTGISTRVTNDNPECRLVKETRICEVRPCGQPVYSSLKKGKKCSKTK KSPEPVRFTYAGCSSVKKYRPKYCGSCVDGRCCTPLQTRTVKMRFRCEDGE MFSKNVMMIQSCKCNYNCPHPNEASFRLYSLFNDIHKFRD
Research Area	Immunology
Source	E.coli
Target Names	Cyr61
Protein Names	3CH61CCN family member 1Cysteine-rich angiogenic inducer 61Insulin-like growth factor-binding protein 10
Expression Region	25-379aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 10xHis-tagged
Mol. Weight	42.6 kDa
Protein Length	Full Length of Mature Protein

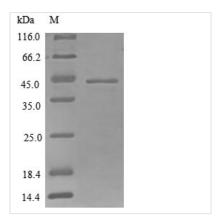
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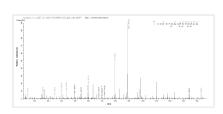




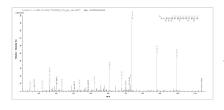
## **Image**



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.



Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-EP006463MO could indicate that this peptide derived from E.coli-expressed Mus musculus (Mouse) Cyr61.



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## Description

This recombinant Mouse Cyr61 protein is an E.coli expressed protein (Full Length of Mature Protein) with N-terminal 10xHis tag and its purity is 90%+ determined by SDS-PAGE. With the appropriate cDNA and PCR methods, Cyr61 expression plasmids can be rapidly produced. which must undergo denaturation and folding cycle, can be recovered with more modest yields. Hence, using small-scale fermentations and laboratory-scale processing equipment, Cyr61 proteins (or subdomains thereof) can usually be produced in sufficient quantities to initiate most studies including detailed structural determinations.which must undergo denaturation and folding cycle, can be recovered with more modest yields. Hence, using small-scale fermentations and laboratory-scale processing equipment, Cyr61 proteins (or subdomains thereof) can usually be produced in sufficient quantities to initiate most studies including detailed structural determinations.

Cyr61, also called Ccn1, is a growth factor-inducible prompt response transcription product that regulates cell proliferation, survival, differentiation, migration, apoptosis, angiogenesis, adhesion, and synthesis of extracellular matrix (ECM) via cell type-specific binding mainly to  $\alpha6\beta1$ ,  $\alpha M\beta2$ , and  $\alpha V\beta3$ integrins. It also plays a vital role in the female reproductive system during embryogenesis and tumorigenesis. Cyr61 is upregulated as an angiogenic factor in the cardiovascular system under pathophysiological conditions, revealing a role for Cyr61 in cellular and tissue self-renewal, potentially involving circulating progenitor cells. Studies have found that Cyr61 limits fibrosis in the



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liver and inhibits hepatocarcinogenesis by blocking EGFR-dependent hepatocyte compensatory proliferation.

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