

# Cysteine-Rich Angiogenic Inducer 61, human recombinant (rHuCYR61)

Catalog No: 97430 Lot No: XXXXX Source: *E. coli* 

**Synonyms:** CYR61, Protein CYR61, Cysteine-rich angiogenic inducer 61, Insulin-like growth factor-binding protein 10,

IGF-binding protein 10, IGFBP-10, IBP-10, Protein GIG1, CCN family member 1, CCN1, GIG1, IGFBP10

## **Background**

CYR61 is a growth factor-inducible, immediate-early gene that has multifaceted activities in various cancers. CYR61 is a secreted, cysteine-rich, heparin-binding protein which is encoded by a growth factor-inducible immediate-early gene. Acting as an extracellular, matrix-associated signaling molecule, CYR61 promotes the adhesion of endothelial cells through interaction with integrin and enhances growth factor-induced DNA synthesis in the same cell type.

## Description

CYR61 human recombinant produced in *E. coli* is a single, non-glycosylated, polypeptide chain containing 357 amino acids and having a molecular mass of 39.5 kDa. CYR61 is purified by proprietary chromatographic techniques.

## **Physical Appearance**

Sterile filtered white lyophilized (freeze-dried) powder.

## **Formulation**

Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.

## Solubility

It is recommended to reconstitute the lyophilized CYR61 in sterile 18 M $\Omega$ -cm H $_2$ O not less than 100  $\mu$ g/ml, which can then be further diluted to other aqueous solutions.

## Stability

Lyophilized CYR61, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution CYR61 should be stored at 4°C between 2-7 days and for future use below -18°C. Please prevent freeze-thaw cycles.

#### **Purity**

Greater than 95.0% as determined by SDS-PAGE.

### **Amino Acid Sequence**

TCPAACHCPL	EAPKCAPGVG	LVRDGCGCCK	VCAKQLNEDC	SKTQPCDHTK	GLECNFGASS	TALKGICRAQ	SEGRPCEYNS	
RIYQNGESFQ	PNCKHQCTCI	DGAVGCIPLC	PQELSLPNLG	${\tt CPNPRLVKVT}$	GQCCEEWVCD	EDSIKDPMED	QDGLLGKELG	
FDASEVELTR	NNELIAVGKG	SSLKRLPVFG	MEPRILYNPL	QGQKCIVQTT	SWSQCSKTCG	TGISTRVTND	NPECRLVKET	
RICEVRPCGQ	${\tt PVYSSLKKGK}$	KCSKTKKSPE	${\tt PVRFTYAGCL}$	SVKKYRPKYC	${\tt GSCVDGRCCT}$	${\tt PQLTRTVKMR}$	FRCEDGETFS	
KNVMMIQSCK	CNYNCPHANE	AAFPFYRLFN	DIHKFRD					

#### **Activity**

Fully biologically active when compared to standard. The ED50 was determined by the proliferation of mouse 3T3 cells is  $<2.0 \mu g/ml$ , corresponding to a specific activity of  $>500 \mu g/ml$ .





## Usage

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