

CYR61 Human E. coli

Product Data Sheet

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| Type: Recombinant | Cat. No.: | |
| Source: E. coli | RBG10110005 | (5 µg) |
| Species: Human | RBG10110020 | (20 µg) |
| Other names: CCN1, GIGI protein | RBG10110100 | (100 µg) |

Description

CYR61 is a member of the CCN family of secreted cysteine-rich regulatory proteins. CYR61 induces angiogenesis by stimulating the proliferation, migration, and adhesion of endothelial cells. Cell migration and adhesion are mediated through binding to specific cell surface integrins and to heparin sulfate proteoglycans. Increased expression of CYR61 is associated with several types of cancer, and correlates with the progression and estrogen independence of human breast cancers. Recombinant Human CYR61 is a 39.5 kDa protein containing 357 amino acid residues. It is composed of four distinct structural domains (modules); the IGF binding protein (IGFBP) domain, the von Willebrand Factor C (VWFC) domain, the Thrombospondin type-I (TSP type-1) domain, and a C-terminal cysteine knot-like domain (CTCK).

Research topic

Cardiovascular disease, Coronary artery disease, Oncology

Amino Acid Sequence

MTCPAACHCP LEAPKCAPGV GLVRDGCGCC KVCAKQLNED CSKTQPCDHT KGLECNFGAS STALKGICRA QSEGRPCEYN
 SRIYQNGESF QPNCKHQCTC IDGAVGCIPL CPQELSLPNL GCPNRLVKV TGQCCEEWVC DEDSIKDPME DQDGLLGKEL
 GFDASEVELT RNNELIAVGK GSSLKRLPVF GMEPRILYNP LQGQKCIVQT TSWSQCSKTC GTGISTRVTN DNPECRLVKE
 TRICEVRPCG QPVYSSLKKG KKCSKTKKSP EPVRFTYAGC LSVKKYRPKY CGSCVDGRCC TPQLTRTVKM RFRCEDEGETF
 SKNVMMIQSC KCNYNCPHAN EAAFPFYRLF NDIHKFRD

Source

E. coli

Purity

95%

Biological Activity

Determined by the dose-dependent stimulation of the proliferation of murine 3T3 cells. The expected ED₅₀ for this effect is 2.0-3.0 µg/ml.

Endotoxin

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

Reconstitution

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. 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.

Storage, Stability/Shelf Life

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