Datasheet

Cat. No. P1296

Recombinant Human Cysteine-rich Angiogenic Inducer 61

Information

Gene ID	3491
Accession #	O00622
Alternate Names	CCN1, Cysteine-rich Angiogenic Inducer 61, GIG1, IGFBP-10
Source	Escherichia coli.
M.Wt	Approximately 39.4 kDa, a single non-glycosylated polypeptide chain containing 357 amino acids.
AA Sequence	TCPAACHCPL EAPKCAPGVG LVRDGCGCCK VCAKQLNEDC SKTQPCDHTK GLECNFGASS TALKGICRAQ SEGRPCEYNS RIYQNGESFQ PNCKHQCTCI DGAVGCIPLC PQELSLPNLG CPNPRLVKVT GQCCEEWVCD EDSIKDPMED QDGLLGKELG FDASEVELTR NNELIAVGKG SSLKRLPVFG MEPRILYNPL QGQKCIVQTT SWSQCSKTCG TGISTRVTND NPECRLVKET RICEVRPCGQ PVYSSLKKGK KCSKTKKSPE PVRFTYAGCL SVKKYRPKYC GSCVDGRCCT PQLTRTVKMR FRCEDGETFS KNVMMIQSCK CNYNCPHANE AAFPFYRLFN DIHKFRD
Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles - 12 months from date of receipt, -20 to -70 °C as supplied - 1 month, 2 to 8 °C under sterile conditions after reconstitution - 3 months, -20 to -70 °C under sterile conditions after reconstitution
Formulation	Lyophilized from a 0.2 μm filtered concentrated solution in citrate buffer solution, 300 mM NaCl, pH 3.0.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.
Biological Activity	Fully biologically active when compared to standard. The ED as determined by a cell proliferation assay using murine Balb/3T3 cells is less than 3.0 μg/ml, corresponding to a specific activity of > 330 IU/mg.
Shipping Condition	Gel pack.
Handling	Centrifuge the vial prior to opening.
Usage	For Research Use Only! Not to be used in humans.

Components and Storage

Components	5μg	100μg	500μg

Recombinant Human Cysteine-rich Angiogenic Inducer 61	5μg	100μg	500μg

Use a manual defrost freezer and avoid repeated freeze-thaw cycles
- 12 months from date of receipt, -20 to -70 °C as supplied
- 1 month, 2 to 8 °C under sterile conditions after reconstitution
- 3 months, -20 to -70 °C under sterile conditions after reconstitution

Quality Control

Purity	> 95 % by SDS-PAGE and HPLC analyses.
Endotoxin	Less than 1 EU/μg of rHuCYR61 as determined by LAL method.

Description

Cysteine-rich angiogenic inducer 61 (Cyr61) encoded by the Cyr61 gene is a dynamically expressed, multifunctional matricellular protein and it is also a secreted, extracellular matrix (ECM)-associated signaling protein of the CCN family. Cyr61 plays essential roles in cardiovascular development during embryogenesis and regulates inflammation, wound healing and fibrogenesis in the adult. Aberrant CCN1 expression is associated with myriad pathologies, including various cancers and diseases associated with chronic inflammation. Mature human Cyr61 shares 93% amino acid sequence identity with mouse and rat Cyr61. Cyr61 consists of four domains. There are an IGFBP domain, a VWF type C domain, a TSP type I domain, and a cysteine knot domain.

Reference

1. Jay P, Berge-Lefranc JL, Marsollier C, et al. 1997. Oncogene. 14:1753-7
2. Lau LF. 2011. Cell Mol Life Sci. 68:3149-63
3. Jun JI, Lau LF. 2011. Nat Rev Drug Discov. 10:945-63
4. Holbourn KP, Acharya KR, Perbal B. 2008. Trends Biochem Sci. 33:461-73.

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