Vitronectin Human HEK293 cells

Product Data Sheet

Type: Recombinant
Source: HEK293 cells
Species: Human

Cat. No.:

RBG103480100	(100 µg)
RBG103480500	(500 µg)
RBG103481000	(1mg)

Introduction to the Molecule

Vitronectin is an 75 kDa glycoprotein consisting of 459 amino acid residues. It is abundant in blood plasma and the extracellular matrix. Vitronectin contains three glycosylation sites that contribute approximately 30% of its molecular mass. It circulates as a singlechain (75 kDa) and two-chain (10 and 65 kDa) forms under reducing conditions. Under non-reducing conditions, the Nterminal 65 kDa and C-terminal 10 kDa fragments are linked by a single disulfide bond . Vitronectin has been implicated as a regulator of many diverse physiological processes including coagulation, fibrinolysis, pericellular proteolysis, complement dependent immune response, cell attachment and spreading. Cell adhesion and migration are directly involved in cancer metastasis and tumor malignancy. The Somatomedin B domain of Vitronectin binds to Plasminogen activator inhibitor-1 (PAI-1), and stabilizes it. Thus vitronectin serves to regulate proteolysis initiated by plasminogen activation. Additionally vitronectin is a component of platelets and is thus involved in hemostasis via heparin binding which neutralizing antithrombin III inhibition of thrombin and factor Xa. Vitronectin contains an RGD (45-47) sequence which is a binding site for membrane bound integrins, which serve to anchor cells to the extracellular matrix.

Amino Acid Sequence

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DQESCKGRCT EGFNVDKKCQ CDELCSYYQS CCTDYTAECK PQVTRGDVFT MPEDEYTVYD DGEEKNNATV HEQVGGPSLT
SDLQAQSKGN PEQTPVLKPE EEAPAPEVGA SKPEGIDSRP ETLHPGRPQP PAEEELCSGK PFDAFTDLKN GSLFAFRGQY
CYELDEKAVR PGYPKLIRDV WGIEGPIDAA FTRINCQGKT YLFKGSQYWR FEDGVLDPDY PRNISDGFDG IPDNVDAALA
LPAHSYSGRE RVYFFKGKQY WEYQFQHQPS QEECEGSSLS AVFEHFAMMQ RDSWEDIFEL LFWGRTSAGT RQPQFISRDW
HGVPGQVDAA MAGRIYISGM APRPSLAKKQ RFRHRNRKGY RSQRGHSRGR NQNSRRPSRA TWLSLFSSEE SNLGANNYDD
YRMDWLVPAT CEPIQSVFFF SGDKYYRVNL RTRRVDTVDP PYPRSIAQYW LGCPAPGHL
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Source

HEK293 cells

Purity

95%

Biological Activity

Data not available.

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

-20°C

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