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Recombinant Human Vetronectin

Cat# ETC-V

Source: E. Coli derived

Purity: >95% by SDS-PAGE

Structure: Monomer

Endotoxin Level: <0.1EU/ug

Molecular Weight: ~62kDa

Formulation: Lyophilized from a 0.2μm filtered solution in PBS without carrier protein

Activity Assay

Recombinant Human Vitronectin promotes attachment of adherent cell in serum free, such as hESC and iPSC. Measured by the ability of the immobilized protein to support the adhesion of HUVEC cells, When 5 x 10^4 cells/well are added to Vitronectin coated plates (5 μg/mL with 100 μL/well), approximately >60% will adhere after 30 minutes at 37 °C.

Reconstitution

Briefly centrifuge the vial before opening. It is recommended to reconstitute the protein in sterile PBS containing 0.1% endotoxin-free recombinant human serum albumin.

Stability & Storage

Use a manual defrost freezer and avoid repeated freeze-thaw cycles. In general: 12 months from date of receipt, -20 to -80°C as supplied. 1 month, 2 to 8°C under sterile conditions after reconstitution. 3 months, -20 to -80°C under sterile conditions after reconstitution.

Protein Description

Vitronectin is a secreted glycoprotein detected as a mixture of 75 kilodalton (kDa) and 65 kDa polypeptides in serum and the extracellular matrix. It primarily in monomeric form, but it can also be found as a dimer after endogenous cleavage. Vitr onectin can support cell adhesion and spreading through binding to various integrins and other proteoglycans. The cell-binding site of vitronectin involves a common cell-attachment tripeptide Arg-Gly-Asp Additionally, recombinant vitronectin can function as a chemically-defined matrix component in human embryonic stem cell and induced pleuripotent stem cell. The full length of recombinant human Vitronectin with His tag expressed in E coli migrates at an apparent molecular weight of about 62 kDa by SDS-PAGE under reducing conditions.

References

Yatohgo T, Izumi M, Kashiwagi H, et al. 1988, CELL STRUCTURE AND FUNCTION 13, 281-292

Wojciechowski K, Chang CH, Hocking DC. Et al. 2004,Protein Expr. Purif. 36:131138.

Chen G, Gulbranson DR, Hou Z, et al. Nat Methods. 2011, 8(5): 424-429