

Synonym

VTN, V75, VN, Vitronectin, S-protein, Serum-spreading factor

Source

Human Truncated Vitronectin Protein, premium grade(VIN-H5117) is expressed from E. coli cells. It contains AA Val 62 - Leu 478 (Accession # <u>P04004</u>). Predicted N-terminus: Met

It is produced under our rigorous quality control system that incorporates a comprehensive set of tests including sterility and endotoxin tests. Product performance is carefully validated and tested for compatibility for cell culture use or any other applications in the early preclinical stage.

GMP-VINH19 is the GMP version of this VIN-H5117. These two proteins display indistinguishable performance profiles, thereby ensuring a seamless transition for end users from early preclinical stag to later clinical phases.

Molecular Characterization

Vitronectin(Val 62 - Leu 478) P04004

This protein carries no "tag".

The protein has a calculated MW of 47.6 kDa. The protein migrates as 46 kDa±3 kDa and 53 kDa±3 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE).

Endotoxin

Less than 0.01 EU per μg by the LAL method / rFC method.

Host Cell Protein

<0.5 ng/μg of protein tested by ELISA.

Host Cell DNA

<0.02 ng/μg of protein tested by qPCR.

Sterility

Negative

Mycoplasma

Negative

Purity

>95% as determined by SDS-PAGE.

Formulation

Supplied as 0.2 µm filtered solution in PBS, 0.15 M Arginine, 0.5 mM EDTA, 250 mM N-Acetyl-L-cysteine, pH7.4 with glycerol as protectant.

Contact us for customized product form or formulation.

Shipping

This product is supplied and shipped with dry ice, please inquire the shipping cost.

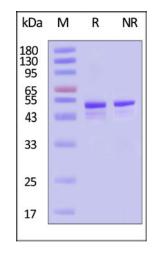
Storage

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 3 years under sterile conditions.

SDS-PAGE



Human Truncated Vitronectin Protein, premium grade on SDS-PAGE under reducing (R) and non-reducing (NR) conditions. The gel was stained with



Human Truncated Vitronectin / VTN-N Protein, premium grade

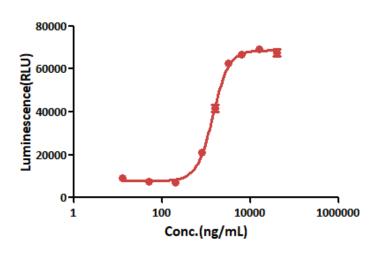




Coomassie Blue. The purity of the protein is greater than 95% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

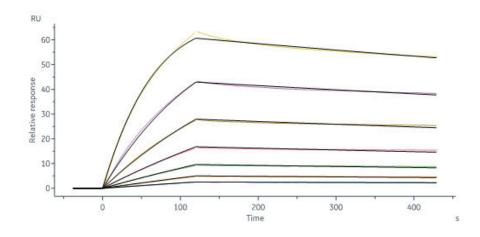
Bioactivity-CELL BASE

Human Vitronectin, premium grade supported the adhesion of iPSC



Human Vitronectin, premium grade (Cat. No. VIN-H5117) supported the adhesion of iPSC. The typical EC50 for this effect is 1414 ng/mL (Routinely tested).

Bioactivity-SPR

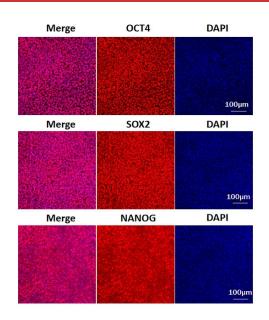


Human ITGAV&ITGB3 Heterodimer Protein, His Tag&Tag Free (Cat. No. IT3-H52E3) immobilized on CM5 Chip can bind Human Truncated Vitronectin Protein, premium grade (Cat. No. VIN-H5117) with an affinity constant of 11.9 nM as determined in a SPR assay (Biacore 8K) (QC tested).

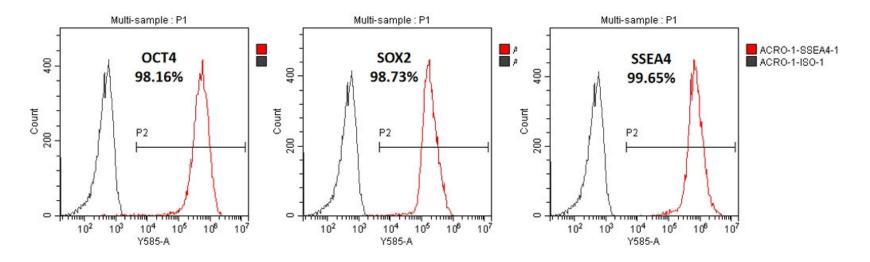
Application Data







Human Truncated Vitronectin Protein, premium grade (Cat. No. VIN-H5117) could maintain the stemness of iPSC at least Passage 5, with high expression of stem cell genes OCT4, SOX2 and NANOG in immunofluorescence.



Human Truncated Vitronectin Protein, premium grade (Cat. No. VIN-H5117) could maintain the stemness of iPSC at least Passage 5, with high expression of stem cell genes OCT4, SOX2 and SSEA4 in FACS.

Background

Vitronectin is also known as S-protein, VN, VTN, V75. Vitronectin, a multifunctional glycoprotein, is involved in coagulation, inhibition of the formation of the membrane attack complex (MAC), cell adhesion and migration, wound healing, and tissue remodeling. The primary cellular source of vitronectin is hepatocytes. Blocking of Hic(a member of the pneumococcal surface protein C (PspC) family) by specific antiserum or genetic deletion significantly reduced pneumococcal binding to soluble and immobilised vitronectin and to Factor H, respectively. In addition, Vitronectin interact with glycosaminoglycans and proteoglycans. Is recognized by certain members of the integrin family and serves as a cell-to-substrate adhesion molecule. Inhibitor of the membrane-damaging effect of the terminal cytolytic complement pathway.

