

Synonym

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

Source

Biotinylated Human Vitronectin, Tag Free, primary amine labeling (VIN-H8113) is expressed from E.coli cells. It contains AA Asp 20 - Arg 398 (Accession # [P04004-1](#)).

Predicted N-terminus: Met

Molecular Characterization

Vitronectin(Asp 20 - Arg 398)
P04004-1

This protein carries no "tag".

The protein has a calculated MW of 43.2 kDa. The protein migrates as 47-55 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Biotinylation

The primary amines in the side chains of lysine residues and the N-terminus of the protein are conjugated with biotins using standard chemical labeling method. A standard biotin reagent (13.5 angstroms) is used in this product.

Biotin:Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

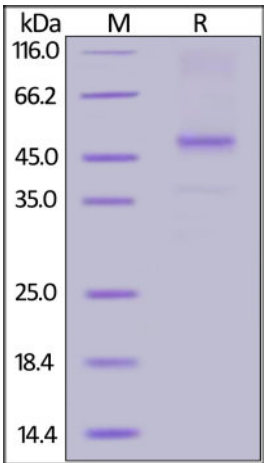
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

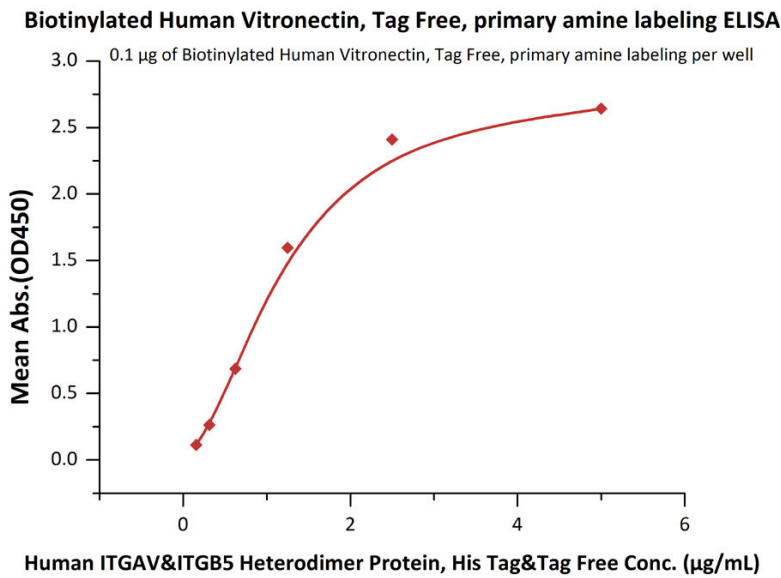
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Biotinylated Human Vitronectin, Tag Free, primary amine labeling on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ELISA



Immobilized Biotinylated Human Vitronectin, Tag Free, primary amine labeling (Cat. No. [VIN-H8113](#)) at 1 µg/mL (100 µL/well) on Streptavidin (Cat. No. [STN-N5116](#)) precoated (0.5 µg/well) plate, can bind Human ITGAV&ITGB5 Heterodimer Protein, His Tag&Tag Free (Cat. No. IT5-H52W5) with a linear range of 0.156-1.25 µg/mL (QC tested).

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.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.