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Recombinant Human Vitronectin (VTN)

Catalog No.	Size	Species	Protein Accession No.
230-00026	10, 50, 100 µg	Human	AAH05046

Synonyms

Vitronectin, VTN, serum spreading factor, somatomedin B, complement S-protein.

Description

Vitronectin (**VTN**) is an abundant glycoprotein present in plasma and the extracellular matrix. The secreted VTN exists in either a single chain form or a clipped, two chain form held together by a disulfide bond. VTN is one of the major cell adhesion proteins in plasma and promotes cell adhesion and spreading, inhibits the membrane-damaging effect of the terminal cytolytic complement pathway, and binds to several serpin serine protease inhibitors.

Preparation

The gene encoding the truncated human VTN (**Asp20-Pro160**) without the signal peptide sequence was cloned and expressed in *Escherichia coli*. The recombinant VTN protein was purified by proprietary chromatographic techniques.

Source

Recombinant protein, purified from *E. coli*.

Predicted Molecular Mass

~18 kDa.

Formulation

- Fine white powder, lyophilized.
- Recombinant VTN was lyophilized from a 0.2 µm filtered phosphate-buffered saline (PBS) with protein concentration at 0.5 mg/mL. It is recommended to briefly spin the vial prior to opening, bring the contents to the bottom, and reconstitute the lyophilized product with sterile 18 MΩ-cm deionized water or your desired buffer.

Stability & Storage

- Lyophilized product is stable at room temperature for 3 weeks, it is recommended to be stored desiccated below -20°C in a manual defrost freezer.
- Upon reconstituted, the protein should be stored at 4°C for one week. For long term storage, it is recommended to add a carrier protein (0.1% HSA or BSA) and store at -20 or -80°C. **Please avoid repeated freeze-thaw cycles.**

Purity

>95%, determined by SDS-PAGE and stained with Commassie blue.

References

1. Felding-Habermann B & Cheresh DA (1993). Vitronectin and its receptors. Curr. Opin. Cell Biol. 5 (5): 864–8.
2. Kamikubo Y, et al (2004). Disulfide bonding arrangements in active forms of the somatomedin B domain of human vitronectin. Biochemistry 43 (21): 6519–34.
3. Mayasundari A, et al (2004). The solution structure of the N-terminal domain of human vitronectin: proximal sites that regulate fibrinolysis and cell migration. J. Biol. Chem. 279 (28): 29359–66.
4. Kamikubo Y, et al. (2002). Identification of the disulfide bonds in the recombinant somatomedin B domain of human vitronectin. J. Biol. Chem. 277 (30): 27109–19.
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