

# **Recombinant Vitronectin**

Cat. No. PS019

Lot. No. (See product label)

#### **Product Description**

Vitronectin is a 478 amino acid protein (1-19 aa = signal domain) that belongs to a member of the pexin family. Vitronectin is an abundant glycoprotein found in serum and the extracellular matrix. It promotes cell adhesion and spreading, inhibits the membrane-damaging effect of the terminal cytolytic complement pathway, and binds to several serpin serine protease inhibitors. It is a secreted protein and exists in either a single chain form or a clipped, two chain form held together by a disulfide bond. Vitronectin has been speculated to be involved in hemostasis and tumor malignancy.

Recent publications indicated that coated recombinant human vitronectin protein alone benefits iPS cell generation when combined with E8 culture medium. The product has also been shown to be an excellent coating matrix material for 11R-tagged recombinant TF intracellular delivery for protein derived iPS protocol with extremely low levels of non-specific interaction. Recombinant human Vitronectin gene (20-398 aa Fragment) was constructed with codon optimization and expressed in non-fusion protein form in <i>E. coli</i> as inclusion bodies. The final product was refolded using a unique "temperature shift inclusion body refolding" technology and chromatographically purified.

# **Application**

Coating recombinant human VTN protein for ES or iPS cell culture can be easily performed as following:

1. Add 1 mL PBS buffer to a single well of 6 well plate, and mix well

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with 10  $\mu g$  recombinant VTN (20  $\mu L$  solution, 0.5 mg/mL of VTN stocking solution).

- 2. Place culture plate at 4°C for overnight.
- 3. Plates are ready for routine ES culture. (Remove coating PBS buffer before cell culture).

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State	Solution
Concentration	0.5 mg/mL
Sterilization Method	Filtration
Storage/Stability	-20 °C or -70 °C for long term storage

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