

CellAdhere™ Vitronectin, Human, Solution



Purified human vitronectin solution for tissue engineering research, cell culture, and biochemistry

Catalog # 07004 0.2 mL

Scientists Helping Scientists™ | WWW.STEMCELL.COM

TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713

INFO@STEMCELL.COM • TECHSUPPORT@STEMCELL.COM

FOR GLOBAL CONTACT DETAILS VISIT OUR WEBSITE

Product Description

Vitronectin is a common glycoprotein that is abundant in animal serum, and can also be found in the extracellular matrix deposited by many cell types. It is primarily used in cell culture as a surface coating to promote cell attachment and spreading (Felding-Habermann et al.; Braam et al.).

CellAdhere™ Vitronectin, Human, Solution is purified from human serum by the method of Hayman et al. using an anti-Vitronectin monoclonal antibody affinity column and sterilized by 0.2 µm filtration. Vitronectin has a purity of > 95% based on Coomassie brilliant blue stain of 7.5% SDS-PAGE. Product is dissolved in 0.2 mL of 0.15 M NaCl, 0.005 M HEPES buffer at approximately pH 7.4. Fibronectin contamination is less than 0.04% based on immunoblotting. This product is ideal for coating surfaces with a thin layer of protein to support cell attachment. The optimal protein concentration may vary depending on the cell type being used, and therefore must be titrated for best results.

Properties

Storage: Store at -20°C.

Shelf Life: Stable for 6 months from date of receipt.

Please refer to the Safety Data Sheet (SDS) for hazard information.

Handling / Directions For Use

PREPARING VITRONECTIN-COATED TISSUE CULTUREWARE

1. Thaw CellAdhere™ Vitronectin, Human, Solution at room temperature (15 - 25°C). Once thawed, use immediately. Do not re-freeze.
2. Dilute Vitronectin solution with sterile D-PBS Without Ca⁺⁺ and Mg⁺⁺ (Catalog #37350) or serum-free medium to obtain desired concentration.

NOTE: Different dilutions will need to be tested to determine the optimal concentration required for each culture system. Typical coating concentrations range between 1 - 50 µg/mL.

3. Add desired amount of diluted Vitronectin solution on the surface of the cultureware to be coated.
For example, use 1 mL to coat a 35 mm Culture Dish (Catalog #27100).
4. Cover coated cultureware to protect from contamination, then incubate at room temperature (15 - 25°C) for 1 - 2 hours.
5. Aspirate excess solution. Avoid scratching the coated surface.
6. Rinse coated cultureware with sterile distilled water.
7. Use coated cultureware immediately. Alternatively, keep sterile and store at 2 - 8°C damp or air dried.

References

Braam SR et al. (2008) Recombinant vitronectin is a functionally defined substrate that supports human embryonic stem cell self-renewal via alpha5beta1 integrin. *Stem Cells* 26(9): 2257–65.

Felding-Habermann B & Cheresch DA. (1993) Vitronectin and its receptors. *Curr Opin Cell Biol* 5(5): 864–8.

Hayman EG et al. (1983) Serum spreading factor (vitronectin) is present at the cell surface and in tissues. *Proc Natl Acad Sci U S A* 80(13): 4003–7.

STEMCELL TECHNOLOGIES INC.'S QUALITY MANAGEMENT SYSTEM IS CERTIFIED TO ISO 13485. PRODUCTS ARE FOR RESEARCH USE ONLY AND NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES UNLESS OTHERWISE STATED.

Copyright © 2016 by STEMCELL Technologies Inc. All rights reserved including graphics and images. STEMCELL Technologies & Design, STEMCELL Shield Design, Scientists Helping Scientists, and CellAdhere are trademarks of STEMCELL Technologies Inc. All other trademarks are the property of their respective holders. While STEMCELL has made all reasonable efforts to ensure that the information provided by STEMCELL and its suppliers is correct, it makes no warranties or representations as to the accuracy or completeness of such information.