Product Data Sheet

No. 7

FNC Coating Mix®

Catalog Number: 0407 and 0407H

Athena Enzyme Systems™
1450 South Rolling Road
Baltimore, MD 21227
USA

T (MD): 410-455-6319
T (USA): 888-892-8408
F: 410-455-1155
aesinfo@athenaes.com

AthenaES®
a division of Athena Environmental Sciences, Inc.

Product Description

FNC Coating Mix® is a specially formulated serum-free tissue culture reagent containing fibronectin, collagen and albumin that is used to enhance the attachment of adherent cells to plastic flasks or microplates. The unique formula creates an extracellular matrix that dramatically increases the rate of cell attachment to any plastic substratum. The matrix accelerates monolayer formation, especially when fastidious cell types such as human prostrate and breast epithelial cells are being propagated. Mammalian cell cultures will attach and grow more effectively on FNC-coated plastic surfaces when cultured in the appropriate serum-free medium. AthenaES™ offers several different serum-free media that when used in conjunction with FNC Coating Mix® increase the growth of cell cultures dramatically.

Product Specifications

Composition	**0407** Bovine (original formulation); **0407H** (human new)
Unit Size	50 mL
Shipping	This product is shipped with a cold pack. (DO NOT FREEZE)
Storage	Store at 4°C
Stability	2 years at 4°C
pH	7.1 - 7.4
Osmolality	280 - 300 mOsM

Product Specifications

Components	Concentration
Fibronectin	10 µg/ml
Collagen, Type 1	35 µg/ml
BSA or HSA	1,000 µg/ml
Potassium chloride	200 µg/ml
Phenol Red	1.0 µg/ml
D-Glucose	1,700 µg/ml
Hepes Buffer	4,800 µg/ml
Sodium chloride	7,000 µg/ml
Sodium phosphate, monobasic	1,700 µg/ml

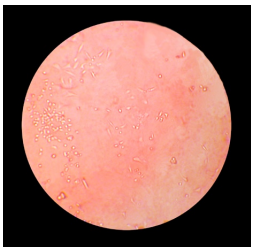
Instructions for Use

1. To coat the growth surface, add 0.2 mL FNC Coating Mix® per square centimeter of surface area of the culture vessel (For example: use 5 mL for a T-25 flask). The surface should be completely covered with a layer of liquid.

2. Incubate for 30 seconds at room temperature and remove the coating mix with a pipet. Residual FNC Coating Mix® will not adversely affect the viability of the cells to be plated. Do not return any "used" coating mix to the original container of FNC. This will compromise the performance of the product. The coating can be done immediately before seeding the cells or up to one hour beforehand.

The Effect of FNC Coating Mix® on Cell Growth

BRFF-55T prostate cancer cells grown in HPC1™ Medium after FNC Coating Mix® application.



BRFF-55T prostate cancer cells grown in HPC1™ Medium without FNC Coating Mix® application.

Figure 1. The above images show the difference in cell monolayer development with and without FNC Coating Mix® application to the tissue culture flasks. These two cultures were grown simultaneously at the same seed concentration in the same medium for 3 days at 37°C, 5% CO_2. The flask surface depicted on the left was coated with FNC. By inspection, there is approximately 85% greater monolayer development in the flask coated with FNC than in the non-treated flask.

Recommended Serum-Free Media:

Catalog Number	Product Name
0401	BRFF-BMZERO™
0402	BRFF-EPM2™
0403	BRFF-HPC1™
0404	BRFF-P4-8F™

Material Safety Data

FOR RESEARCH USE ONLY. NOT INTENDED OR APPROVED FOR HUMAN, DIAGNOSTICS OR VETERINARY USE. Do not ingest, swallow or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. For complete safety information see full Material Safety Data Sheet.