

Product Data Sheet

BRFF-BMZERO™

Catalog Number: 0401

Product Description

BRFF-BMZERO™ is a complete serum-free medium comprised of essential amino acids, vitamins, inorganic salts, trace elements and growth factors designed for culturing human breast cell lines. BMZERO™ was developed and has been extensively used for establishing new epithelial cell lines from explants of human breast tissue and to grow immortalized normal breast cell lines. Optimal attached monolayer cell growth can be achieved when used in conjunction with FNC Coating Mix®.

Product Specifications

Unit Size	500 mL
Shipping	Supplied frozen
Storage	Store at -80°C
Stability	4 - 6 weeks at 4°C, 2 years at -20°C
pH	7.3 ± 0.2
Osmolality	270 - 300 mOsM

Recommended Protocol: Step Down Protocol

Most tissue cultures are initiated in serum-containing media in order to simulate a “natural” environment thereby maximizing cell growth. The transition from a serum-containing to a serum-free medium generally requires an adaptive process, in which the cells are slowly “weaned” from their dependence on serum. A sudden transition to serum-free environment is generally not successful.

1. Cultivate the cell line to be propagated in the base medium employed.
 - 1.1. If the serum concentration is greater than 5%, reduce the amount of serum to 5%. Once the cells are growing well, proceed to step 2.
2. Transfer the cells to BRFF-BMZERO™ supplemented with 2% FBS (or 1:1 mixture of base medium to BMZERO™).
 - 2.1. When the cells are growing well, proceed to step 3. If the cells do not grow well, increase the serum concentration to 3 or 4% (2:1 mixture of base medium to BMZERO™) and repeat this step.
3. Transfer the cells to BMZERO™ supplemented with 1% FBS (1:4 mixture of base medium to BMZERO™).
 - 3.1. Once the cells are growing well with 1% serum, continue to step down the serum concentration to 0.75% (1:6 mixture of base medium to BMZERO™) and then to 0.5% (1:10 mixture of base medium to BMZERO™).
 - 3.2. Adjust the size of the step down increments as needed to maintain good growth. Once the cells are growing well in 0.5% serum (or 1:10 mixture of base medium to BMZERO™), proceed to step 4.
4. Transfer the cells to BMZERO™ without serum or base medium. Passage the cells using standard trypsinization techniques once a monolayer is observed.



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Tips:

1. For attachment-dependent cells pre-coat the growth substratum with FNC Coating Mix®. This becomes more important as the serum concentration is reduced in the medium.
2. When performing the step down cultivation, continue to grow a portion of the cells in the medium from which they came to ensure an adequate supply of adapted cells should the cells not grow in the next step.

Recommended Supplemental Media:

Catalog Number	Product Name
0407	FNC Coating Mix®
0405	PET™
0406	Freezing Media Pair™

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.