

# BIO-AMFTM-1

Medium for Human Amniotic Fluid and Chorionic Villi Samples

BIO-AMF™-1 Basal Medium BIO-AMF™-1 Supplement

REF 01-190-1

REF 01-192-1

1 2-8°C

1-10°C to -20°C

## Instructions for Use

## **Product Description**

The in vitro cultivation of amniotic fluid cells and chorionic villi is an essential part of every diagnostic cytogenetics laboratory, since the preparation of metaphase chromosome spreads is dependent upon obtaining cells in division. Amniocentesis and chorionic villi sampling are the major invasive diagnostic procedures used for the detection of fetal chromosomal abnormalities. BIO-AMF<sup>TM</sup>-1 Medium is specifically optimized for the primary culture of human amniotic fluid cells and chorionic villi samples used in prenatal diagnostic testing. The supplement is supplied frozen and contains serum.

#### **Precaution and Disclaimer**

- Do not use if a visible precipitate is observed in the medium.
- Use of Biological Industries BIO-AMF™-1 Medium does not guarantee the successful outcome of any prenatal diagnostic testing.
- Do not use BIO-AMF<sup>™</sup>-1 Medium beyond the expiration date indicated on the product label.

The product is prepared by an aseptic, strict, validated process in order to minimize as possible the risk for contamination and to ensure the safety and quality of the product. The membrane filtration and aseptic process is validated by media fill to ensure a safety level of 1 to 5000 bottles. Due to the residual risks of sample contamination, and the severity in such case, we recommend to establish parallel test systems as part of the procedure.

### Storage and Stability

- Do not use BIO-AMF™-1 Medium beyond the expiration date indicated on the product label.
- The complete medium is stable for 14 days when stored at 2-8°C.
- Do not freeze the complete medium. Protect both the basal medium and the complete medium from light.

#### Instructions for Use

For the preparation of 500ml complete medium, use 01-190-1A with 01-192-1E. For the preparation of 100ml complete medium, use 01-190-1B with 01-192-1D.

Thaw the BIO-AMF<sup>TM</sup>-1 Supplement by swirling in a  $37^{\circ}$ C water bath, and aseptically transfer the contents to the bottle of BIO-AMF<sup>TM</sup>-1 Basal Medium.

Mix the complete medium by swirling the bottle, and add 2mM L-Glutamine (L-Glutamine Solution 200mM, Cat. No. 03-020-1). Antibiotics may be added if desired (Gentamicin, Cat. No. 03-035-1).

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#### **Procedure**

BIO-AMFTM-1 Medium may be used for:

- Primary culture of amniotic fluid cells
- Culture of passaged amniotic fluid cells
- Propagation of chorionic villus cells

The medium may be used in both open and closed culture systems.

It is recommended to use cells from 2.5ml of amniotic fluid per one coverslip.

The following protocol and the volumes indicated are only general guidelines for use.

#### In Situ Culture of Amniotic Fluid Cells

- 1. Centrifuge 20ml of amniotic fluid at 750 rpm for 10 minutes.
- Carefully decant the amniotic fluid from the cell pellet into a sterile test tube.
- 3. Re-suspend the cell pellet with 2ml of amniotic fluid.
- 4. Add 2ml of BIO-AMF<sup>TM</sup>-1 Medium and swirl gently.
- Culture 0.5ml of the cell suspension on each coverslip in a tissue culture dish.
- 6. Incubate cultures at 37°C in 5% CO, atmosphere.
- 7. Flood cultures on day 2 with 1.5ml of BIO-AMF<sup>TM</sup>-1 Medium.

After 5 days, check the cultures for the presence of colonies.

- 8. After the colonies first appear (5-7 days), replace the medium with fresh BIO-AMF™-1 Medium.
- When the cultures have colonies of sufficient size, proceed with harvesting.

Note: It is recommended to replace the medium with fresh BIO-AMF<sup>TM</sup>-1 Medium the day before harvesting.

# Flask Method Culture of Amniotic Fluid Cells – Open and Closed Systems

Use the same procedure as for the in situ culture, with the following adaptations:

- Re-suspend the cell pellet with 4ml of amniotic fluid. Add 16ml of BIO-AMF™-1 Medium and swirl gently.
- 2. Culture 5ml per each T25 flask. Place the cap loosely on the flask and incubate undisturbed at 37°C in 5%  $\rm CO_2$  atmosphere.
  - For Closed Systems: Flush each culture flask with  $5\% \text{ CO}_2$  95% air through  $0.2\mu$  sterile filter for 20 seconds. Tighten the caps and incubate the flasks at  $37^{\circ}\text{C}$ .
- 3. Check all flasks for growth after 5 days.

### **Quality Control**

BIO-AMF<sup>TM</sup>-1 Basal Medium and Supplement are tested for sterility, pH and osmolality. In addition, each batch is tested for cell growth using primary human amniotic fluid cells in a leading clinical cytogenetics laboratory.

For full specifications please check the lot specific Certificate of Analysis (CoA).

## **Quality Assurance**

- For in vitro diagnostic use. The medium is not intended for therapeutic use.
- Listed in Europe under CE IVD class I, thus comply with European In-Vitro Diagnostic Devices Directive (98/79/EC) requirements.
- Manufactured under ISO 13485 QMS and in compliance with applicable cGMP guidelines.
- Manufactured under controlled environments and processes in accordance with:
  - ISO 13408 Aseptic Processing of Health Care Products:
  - ISO 14644 Airborne Particulate Cleanliness Classes in Clean Rooms and Clean Zones;



## Authorized Representative in the European Community:

MedNet GmbH Borkstrass 48163 Muenster Germany



#### Manufacturer:

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#### **Product Label Symbols**



Indicates the manufacturer's catalogue number so that the product can be identified.



Indicates the manufacturer's batch code so that the batch or lot can be identified. Note: Synonyms for batch code are lot number and batch number.



Indicates the date after which the product is not to be used



Indicates the temperature limits to which the product can be safely exposed.



Indicates a product that has been manufactured using accepted aseptic techniques.



Indicates that the product meets the requirements of the applicable EC directives



Indicates a product that is intended to be used as an in vitro diagnostic medical device.



Indicates the need for the user to consult the instructions for use.

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