



HiAmnioXL™ Amniocyte Karyotyping Medium

With L-Glutamine, FBS, Gentamicin Sulfate and Sodium bicarbonate

Product Code: AL202A

Intended Use:

HiAmnioXL™ Amniocyte Karyotyping Medium is a karyotyping medium recommended for culture and genetic analysis of human amniotic fluid, cells and chorionic villi (CV) samples.

Principle and Interpretation:

Cytogenetic studies include metaphase and pro-metaphase studies carried out on bone marrow cells to detect chromosomal aberrations associated with structural and numerical abnormalities.

AL202A is HiAmnioXL™ Amniocyte Karyotyping Medium composed of a basal medium and supplemented with L- Glutamine, Serum, Antibiotic and is supplied frozen.

Type of Specimen:

Clinical samples – human amniotic fluid, cells and chorionic villi (CV) samples

Warning and Precautions:

In Vitro Diagnostic Use only. Read the label before opening the container. Wear protective gloves / protective clothing /eye protection /face protection. Follow proper aseptic techniques while handling specimens and cultures. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety datasheets.

Procedure:

Thaw AmnioXL™ at refrigerator temperature (2 - 8°C). Swirl gently and intermittently during thawing.

Note: The medium already contains L-Glutamine and an antibiotic.

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

It is recommended to use the cells from 2.5 mL of amniotic fluid per coverslip.

In Situ culture of amniotic fluid cells:

1. Centrifuge 20 mL of amniotic fluid at 750 rpm for 10 minutes.
2. Carefully decant the amniotic fluid (supernatant) from the cell pellet into a sterile test tube.
3. Resuspend the cell pellet with 2 mL of amniotic fluid.
4. Add 2 mL of AmnioType-1 Medium and swirl gently.
5. Culture 0.5 mL of the cell suspension on each coverslip put in a tissue culture dish.
6. Incubate the coverslips at 37°C in a 5% CO₂ atmosphere.
7. Flood cultures on day 2 with 1.5 mL of AmnioType-1 Medium.
8. After 5 days, check the cultures for the presence of colonies.
9. After the colonies first appear (5 - 7 days), replace the medium with fresh AmnioType-1 Medium.
10. When the size of colonies is sufficiently large, proceed with harvesting.

Note: It is recommended to replace the medium with fresh AmnioType-1 Medium the day before harvesting.

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

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

1. Resuspend the cell pellet with 4 mL of amniotic fluid. Add 16 mL of AmnioType-1 Medium and swirl gently.
2. Culture 5 mL per T25 flask. Place the cap loosely on the flask and incubate undisturbed at 37°C in a 5% CO₂ atmosphere.

For Closed Systems: Flush each culture flask with 5% CO₂ - 95% air through a 0.2 µm sterile filter for 20 seconds. Tighten the caps and incubate the flasks at 37°C.

3. Check all flasks for growth after 5 days.

Quality Control:**Appearance**

Clear solution.

pH

7.00 - 7.50

Osmolality in mOsm/Kg H₂O

280.00 - 330.00

Sterility

No bacterial or fungal growth is observed after 14 days of incubation, as per USP specification.

Endotoxin content

NMT 10 EU/ml

Amniocyte cytogenetic performance test

Passes

Storage and shelf life:

Store at -30°C to -10°C in a freezer that is not self-defrosting. Repeated freezing and thawing reduces mitogenic activity and should be avoided. Once thawed, the medium can be aliquoted into smaller volumes and frozen for future use.

Shelf life is 24 months.

Use before expiry date given on the product label.

Precaution and Disclaimer:

For research use only, not for clinical diagnosis, and treatment.

Disclaimer :

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