



HUMAN CYTOGENETICS

Shanghai XP Biomed

Shanghai XP Biomed was established in 2005, and is ISO13485 certified. VivaCell brand was founded by Shanghai XP Biomed in 2012 and VivaCell products including AmnioType™-1, PBType™-1 and MarrowType™ are used in a large number of cytogenetic laboratories all around the world. Our cytogenetic product line gives you the option of selecting high quality tools that can help you make critical decisions in the lab.

Today, our products and services portfolio benefit both life science and medical customers. Whether it is in developing culture media for cell therapy, or supplying media and reagents for classical cell culture, we are committed to providing our customers with reliable products. We do this through our advanced GMP compliant manufacturing and quality control systems, superior regulatory expertise, in-depth market knowledge, and extensive technical customer support, training, and R&D capabilities.

BOOST PERFORMANCE INCREASE CONSISTENCY



Performance

Consistent lot-to-lot performance

Optimized products for the karyotypic analysis of amniotic fluid, chorionic villus, peripheral blood, bone marrow, and hematopoietic cells

Delivers accelerated cell growth with high mitotic index and excellent chromosomal morphology

Clean and reproducible results saving lab time with quick analysis and easy interpretation

Quality Control

Manufactured in compliance with the FDA's quality system regulation (cGMP) and the current requirements of ISO 9001 and ISO 13485

Extensive QC testing for culture performance, sterility, and endotoxin

Support

Regional technical support

Documentation and traceability documentation including Certificate of Analysis, and Certificates of Origin

Backed by more than 10 years of media development and manufacturing experience



AMNIOTIC FLUID AND CHORIONIC VILLUS CULTURE

The optimized medium for prenatal diagnostics

The AmnioType™ family of cytogenetic media are designed for primary culture of human amniotic fluid (AMF) cells and chorionic villi (CV) samples intended for karyotypic analysis. Our products ensure high mitotic index, providing an accelerated growth of cells for rapid detection and enhanced analysis of chromosomal abnormalities. With AmnioType™ media, chromosome karyotyping time is greatly reduced, with significantly high cell yield by Day 7 as compared to conventional media (Figure 1).

The AmnioType™ media are easy to use and application-validated for cytogenetic analysis, giving reproducible results that are easy to analyze and interpret.

The enhanced buffering capacity of AmnioType™ media is ideal for AMF and CV cells cultured in both open (5% CO₂) and closed systems. AmnioType™ -1 and AmnioType™ -2 are ready-to-use complete media, requiring no serum or additional supplements.

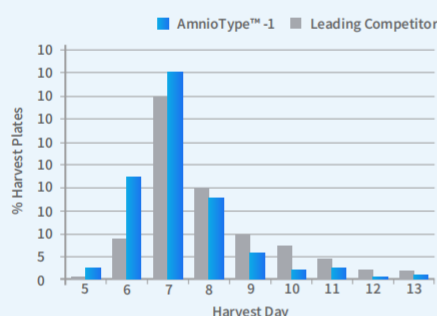


Figure 1: Comparison of the percentage of harvested plates according to harvest day between AmnioType™ -1 and a competitor (AM). Data provided by customer.



PRODUCT INFORMATION

	AmnioType™-1	AmnioType™-2
Open & Closed Systems	✓	✓
Cell Types	AMF and CVs	AMF and CVs
Advantage	- One bottle - Ease-of-use - Rapid growth of AMF and CV cells	- Less epithelial cells - Improved banding
Complete Medium	✓	✓
Chromosome Karyotyping Time	Up to 8 days	Up to 12 days
Stability (after thawed)	7 days*	14 days*
Shelf Life (when frozen)	24 months	24 months

*For longer storage and stability, dispense into aliquots and refreeze



ORDER INFORMATION

Product	Cat. #	Size
AmnioType™-1 Amniocyte Karyotyping Medium	C3620-0100	100 ml
AmnioType™-2 Amniocyte Karyotyping Medium	C3621-0100	100 ml



BONE MARROW CULTURE

The optimized medium for short-term cultivation of primary bone marrow cells for chromosome evaluation

MarrowType™ Bone Marrow Karyotyping Medium is intended for use in short-term cultivation of primary bone marrow cells for chromosome evaluation.

MarrowType™ Bone Marrow Karyotyping Medium is based on RPMI-1640 basal medium supplemented with L-glutamine, fetal bovine serum, and antibiotics (Gentamicin). The medium does not contain any mitogens or conditioned medium. MarrowType™ Bone Marrow Karyotyping Medium was designed for samples with low cell counts and a low mitotic index.



PRODUCT INFORMATION

MarrowType™ Bone Marrow Karyotyping Medium	
Cell Types	Bone Marrow
Advantage	■ Quick results, time-saving ■ Excellent growth promotion also in small culture volumes ■ Without conditioned medium - no mitogens for more control over your culture ■ High mitotic index
Complete Medium	■ Ready to use ■ No further supplements required
Chromosome Karyotyping Time	48-72 hours
Stability (after thawed)	10 days*
Shelf Life (when frozen)	24 months
Quality Control	MarrowType™ Bone Marrow Karyotyping Medium is tested for sterility, pH, osmolality and endotoxin concentrations, as well as measuring the mitotic index

*For longer storage and stability, dispense into aliquots and refreeze



ORDER INFORMATION

Product	Cat. #	Size
MarrowType™ Bone Marrow Karyotyping Medium	C3630-0100	100 ml



HEMATOPOIETIC CULTURE

The optimized medium for hematopoietic cells from bone marrow and peripheral blood

Cytogenetic analysis of human hematopoietic cells using bone marrow aspirates is a standard practice in hematology. HematoType™ Hematopoietic cells Karyotyping Medium was developed to stimulate the proliferation of human hematopoietic cells from bone marrow as well as from peripheral blood. HematoType™ Hematopoietic cells Karyotyping Medium significantly improves the mitotic index and accelerates cell growth and is optimized for use with samples that contain a low number of cells and/or low mitotic index. Therefore, the medium is particularly effective for karyotyping of acute non-lymphocytic leukemias and various stages of chronic myelogenous leukemia, as well as other hematological disorders. HematoType™ Hematopoietic cell Karyotyping Medium is based on MEM-alpha basal medium supplemented with L-glutamine, fetal bovine serum, antibiotics (gentamicin), and conditioned medium.



PRODUCT INFORMATION

HematoType™ Hematopoietic cells Karyotyping Medium	
Cell Types	Hematopoietic cells
Advantage	■ Quick results, time-saving ■ Excellent growth promotion for samples with low cell count and/or low mitotic index ■ Contains conditioned media to stimulate cell growth ■ Works with both bone marrow and peripheral blood ■ Unique formulation
Hematological Disorders	■ The medium effective for acute non-lymphocytic leukemia and various stages of chronic myelogenous leukemia ■ Hematological disorders such as myelodysplastic syndrome and polycythemia vera
Complete Medium	■ Ready to use ■ Contains a conditioned medium with better performance than that of Giant Tumor Cells (GTC) ■ No further supplements required
Chromosome Karyotyping Time	48-72 hours
Stability (after thawed)	10 days*
Shelf Life (when frozen)	24 months
Quality Control	HematoType™ Hematopoietic Karyotyping cells Medium is tested for sterility, pH, osmolality and endotoxin concentrations, as well as measuring the mitotic index

*For longer storage and stability, dispense into aliquots and refreeze



ORDER INFORMATION

Product	Cat. #	Size
HematoType™ Hematopoietic cells Karyotyping Medium	C3640-0100	100 ml



BLOOD LYMPHOCYTE CULTURE

The optimized medium for short term culture of peripheral blood lymphocytes

Peripheral Blood karyotyping is an important tool in modern human cytogenetics, providing information about chromosomal abnormalities, their frequency in the population, and the relationship between specific chromosomal abnormalities and phenotypic effects. PBType™-1 Peripheral Blood Karyotyping Medium is specifically optimized for short-term culture of peripheral blood lymphocytes for chromosome analysis. No addition of serum, glutamine, or antibiotics is required.



PRODUCT INFORMATION

PBType™-1 Peripheral Blood Karyotyping Medium	
Cell Types	Lymphocytes
Advantage	■ Quick results, time-saving ■ Excellent growth promotions ■ High mitotic index ■ Reliable results
Complete Medium	■ Ready to use ■ No further supplements required
Chromosome Karyotyping Time	48-72 hours
Stability (after thawed)	10 days*
Shelf Life (when frozen)	24 months
Quality Control	PBType™-1 Peripheral Blood Karyotyping Medium is tested for sterility, pH, osmolality and endotoxin concentrations, as well as measuring the mitotic index

*For longer storage and stability, dispense into aliquots and refreeze



ORDER INFORMATION

Product	Cat. #	Size
PBType™-1 Peripheral Blood Karyotyping Medium	C3601-0100	100 ml
PBType™-1 Peripheral Blood Karyotyping Medium	C3601-0150	5 ml * 30
PBType™-1 Peripheral Blood Karyotyping Medium	C3601-0005	5 ml

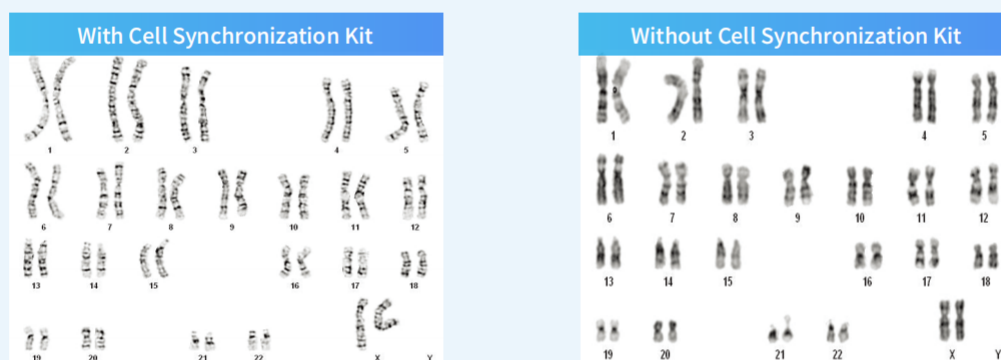


CELL SYNCHRONIZATION

High resolution cytogenetic analysis for detailed analysis of the karyotype

The blood cell karyotyping method was developed to provide information about chromosomal abnormalities. In the presence of an appropriate mitogen, lymphocytes are stimulated to enter into mitosis with DNA replication. Then, methotrexate, a mitotic inhibitor, is added to block cells at the S-phase of the cell cycle. After 16-18 hours, most of the dividing cells are in the S-phase. After treatment with a hypotonic solution, fixation and staining, chromosomes can be microscopically observed and evaluated for abnormalities. This Kit provide a high resolution analysis which is a special manipulation of the routine blood karyotyping procedure designed to provide a large number of mitotic figures in late prophase or prometaphase. The chromosomes appear longer and less condensed. With the Cell Synchronization Kit, the chromosomes will show a greater level of chromosomal band resolution not seen in routine analysis.

Comparison between the karyograms of peripheral blood cells using PBDType™-1 Karyotyping medium (Cat.# C3601) with or without the Cell Synchronization Kit (Cat.# C3610)



PRODUCT INFORMATION

Cell Synchronization Kit	
Cell Types	Amniotic Fluid, Chorionic Villi, Bone Marrow, Lymphocytes and Hematopoietic cells
Advantage	■ Large number of mitotic figures ■ Longer and less condensed chromosomes ■ High level of band resolution ■ Detailed analysis of the karyotype
Kit Components	■ Methotrexate (Amethopterin) ■ Thymidine

*For longer storage and stability, dispense into aliquots and refreeze

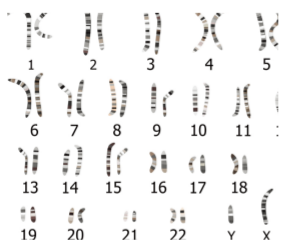


ORDER INFORMATION

Product	Cat. #	Size
Cell Synchronization Kit	C3610-0012	Methotrexate 1.5 ml * 4
		Thymidine 1.5 ml * 4



KARYOTYPING REAGENTS



Quality reagents for cytogenetic labs

Shanghai XP Biomed offers a complete range of products and reagents for your cytogenetic karyotyping needs from start to finish, including colcemid, PHA, and cell synchronization kit for high-resolution chromosomal studies.



ORDER INFORMATION

Product	Cat. #	Size
Amphotericin B Solution, 250 micrograms/ml	C3430-0100	100 ml
Colcemid (Demecolcine) Solution	C3541-0010	10 ml
Phytohemagglutinin-M (PHA-M), Liquid	C3545-0005	5 ml
Potassium Chloride Solution, 0.075 Molar	C3540-0500	500 ml
	C3540-0100	100 ml
Trypsin Solution B (0.25%), w/o Calcium and Magnesium, w/o Phenol Red	C3538-0100	100 ml



RELATED PRODUCTS

Product	Cat. #	Size
Akougard™-1, Disinfection solution for water tray in CO ₂ incubators	C3480-0100	100 ml
Akougard™-2, Disinfection solution for water bath	C3481-0050	50 ml
	C3481-0500	500 ml
Pharmacidal, for disinfecting surfaces	C3490-1000	1 L
	C3490-0100	100 ml
MycoEZ™ Mycoplasma qPCR Kit	M5010-0025	25 preps
MycoNator™-1 Antibiotic Solution 100X Conc.	C3470-0020	20 ml
MycoNator™-2 Antibiotic Solution 100X Conc.	C3471-0020	20 ml
MycoNator™-3 Antibiotic Solution 100X Conc.	C3472-0100	100 ml
	C3472-0020	20 ml
	C3472-0010	10 ml
RPMI 1640, with L-Glutamine	C3010-0500	500 ml
RPMI Medium 1640, w/o D-Glucose, w/o L-Glutamine	C3015-0500	500 ml
RPMI Medium 1640, with 25mM Hepes, with L-Glutamine	C3018-0500	500 ml
Dulbecco's Phosphate Buffered Saline (DPBS), w/o Calcium and Magnesium	C3590-0500	500 ml
Gentamycin Sulfate Solution, 50 mg/ml	C3450-0100	100 ml
Kanamycin Sulphate Solution, 10 mg/ml	C3460-0100	100 ml
L-Glutamine Solution (200 mM)	C3543-0500	500 ml
	C3543-0100	100 ml
HEPES Buffer Solution, pH 7.3 at 37°C, 1.0 Molar	C3544-0100	100 ml
Penicillin-Streptomycin Nystatin Solution, 10,000 units/ml Penicillin G Sodium Salt, 10mg/ml Streptomycin Sulfate, 1, 250 units/ml Nystatin	C3422-0100	100 ml
Penicillin-Streptomycin Amphotericin B Solution, 10,000 units/ml Penicillin G Sodium Salt,	C3423-0100	100 ml
Water, Cell Culture Grade, SLE Grade	C3560-0500	500 ml

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