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PRODUCT CATALOG 2015

Sustaining Quality of Life Through Research™

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STATEMENT OF ETHICAL STANDARDS

The team at StemExpress, LLC, commit ourselves to the following principles, which we recognize are standards of ethical behavior and excellence in practice that are fundamental to all activities in biotechnology:

Respect for Human Individuals and the Public Good

We recognize that all humans have inherent dignity, rights, beliefs and perceptions that cannot be sacrificed for scientific or economic benefit. The public good is a collective good that should always be taken into account. StemExpress is committed to ensuring that this respect is rooted in all that we do.

Respect for the Environment

We recognize the importance of the moral relationship between humans and our natural environment. The caretaking and safeguarding of the environment is always taken into consideration in our daily activities. The StemExpress Corporate Office and Laboratory are located in a Gold-Rated Leed™ Certified Green Building. We are also committed to recycling and keeping our environment clean and safe.

Benefit and Harm

We believe all activities have social, economic and environmental impacts. The team at StemExpress strives to create a positive impact in these areas and on the scientific research community as a whole. All of our activities are aimed at promoting good and avoiding harm.

Integrity and Accountability

We believe that our activities should be conducted honestly, truthfully, lawfully, impartially, competently and with considered regard for transparency of processes. We recognize that as individuals and as an institution, we are responsible for our actions; therefore, we rely on our proven protocols, policies, and operating procedures. The principles noted in each of these provide guidance for the application of ethical behavior in our work as members of the biotechnology community.

Our Values

Teamwork– We support one another and work together, valuing the worth that people, as individuals, bring to the organization.

Integrity– We will demonstrate honest, positive, ethical behavior in dealing with our customers, vendors, employees, affiliates and the communities in which we do business.

Community– We value the communities in which we do business and will endeavor to always have a positive impact on such communities.

Quality Services– We take pride in our work and develop our talents, skills and abilities in order to benefit our customers and contribute to the overall environment of our workplace.

Financial Responsibility– We will spend all our resources wisely, with an eye on long term growth, investing in our future and being wise stewards of our resources.

Innovation– We will continuously strive to develop new products and new methods and means of production to continuously improve both the quality of our final product and the efficiency of our production methods. We will always welcome new insights, new techniques and new ideas, fostering a climate of thoughtful change.

2015

Greetings:

I would like to first thank all of our current customers for helping us achieve recognition by **Inc. 500 as one of the Fastest Growing Private Companies in the United States in 2014**. Second, I would like to invite anyone who is not a customer of ours, to give us the opportunity to show you why clients globally are choosing StemExpress for their sourcing needs. In our state-of-the-art laboratory, we isolate and culture primary human somatic, progenitor and stem cells. Using the most up-to-date technology, we guarantee every sample delivers the purity, viability and quality you need to execute your research. The StemExpress Donor Center, has over 1000 donors for repeat and custom assays. Additionally, we have access to over 100,000 patients and donors worldwide. Come see why our clients are using us as their CRO and primary source of fresh and frozen products from healthy and diseased donors.

StemExpress participated in over **40 clinical trials globally** in 2014, and we are expecting to double that number next year. From large to small businesses and institutions, one of our greatest pleasures is watching them thrive. **In 2014, four of our major clients sold their companies for over 50 million dollars each**, and StemExpress has

been their main source for products since they were small companies. At StemExpress we provide and source what you need which allows you to focus on what you do best. This successful model is being used across the board from academia all the way to big pharma. Let us prove to you why we are a leader in this industry and growing four times faster than our competitors.

Some exciting additions are coming in 2015. **With procurement and collection now being done coast to coast**, we thought it was time to start providing fresh cells not only same day on the west coast, but also on the east coast. In addition, we want to include our international clients in these advancements by offering fresh products **overnight internationally**. There is even more coming in 2015 but I do not want to ruin the surprise. Be sure to sign up for our mailing list and watch for news blasts to ensure you will not miss out on any of the exiting advancements that you will want to add to your portfolio before your competitors do!

On behalf of the StemExpress team we thank you for your support.

Cate Dyer, Founder & CEO

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ABOUT STEMEXPRESS

StemExpress is a multi-million dollar company that supplies human blood, tissue products, primary cells and other clinical specimens to biomedical researchers around the world to fuel regenerative medicine and translational research. Founded in 2010, we offer the largest variety of raw material in the industry, as well as fresh, fixed and cryopreserved human primary cells.

Our Products and Services

StemExpress is the only company of its kind to both procure tissues and isolate cells for researchers' individual needs in its own labs. Our human tissue products range from fetal to adult and healthy to diseased, and we also collect bone marrow and leukapheresis for isolation. In our state-of-the-art laboratory, we isolate and culture primary human somatic, progenitor and stem cells. Using the most up-to-date technology, we guarantee every sample delivers the purity, viability and quality your investigators need. StemExpress is also a Contract Research Organization (CRO) and provides biopharmaceutical development, biologic assay development, commercialization, preclinical research, clinical research, and clinical trials management.

Our Promise

Working with hospitals and clinics across the United States, all human tissue and blood procurement is performed in accordance with IRB-approved protocols and consents. Protecting the privacy of our researchers and donors is always the highest priority at StemExpress.

Our team is driven by the knowledge that our products and services are helping researchers develop better means of preventing, diagnosing and treating disease. Our goal is to build strong, responsive and long-lasting relationships with our clients and we take pride in our researcher-oriented approach. By partnering with StemExpress, you'll get the high quality samples you need so that you can focus on the research. Let us take your research to the next level.

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ABOUT STEMEXPRESS

Whole Blood and Leuko Paks

At our on-site donation center, phlebotomists are able to collect 10-500mL of whole blood from a wide variety of donors. Healthy and diseased donors can be scheduled specifically for your project requests. Our Leuko Paks are a concentrated collection of mononuclear cells collected from healthy donors. For the Full Leuko Pak, approximately three blood volumes are processed using the Spectra Optia® Apheresis System and between 200-300mL of plasma can be procured at the same time as the mononuclear cells.

Maternal Blood

StemExpress has become the largest provider of maternal blood globally. With volumes that range from 150-200 samples per week, projects can be scheduled to meet your needs and we can collect samples from every type of ethnicity and gestation needed. Additionally, matched blood and tissue samples for prenatal and genetic research are available.

Umbilical Cord Blood

StemExpress is IRB approved to collect Therapeutic and Non-Therapeutic umbilical cord blood specimens. Cord blood is collected from numerous hospitals and clinics throughout the United States and same day delivery can be provided within most areas of Northern

California. We can customize cell isolation to meet your needs and provide fresh or frozen human primary cells.

Human Tissue

StemExpress has the largest variety of raw materials available in the industry. Human tissues range from fetal to adult tissues and healthy to diseased samples. Cadaverous samples can also be provided. We isolate cells from most of these tissues and provide those cells either fresh or cryopreserved. For an extensive list of all of the tissues we offer please log on to our website at www.stemexpress.com.

Bone Marrow

Our board certified physicians collect bone marrow at our on-site donation center. Local anesthetic is used on the extraction site to numb the area. A needle is then inserted into the pelvic bone and a small sample of bone marrow is extracted. Procured bone marrow is immediately taken to our laboratory where our lab technicians are able to isolate cells within minutes of collection.

Human Primary Cells

Offering a wide range of human primary cells, StemExpress has the largest variety of fresh cells available in the industry. Functioning out of a state-of-the-art laboratory that uses the latest technology allows us to guaranty every sample delivers the **purity, viability & quality** your investigators need. These human cells are made available through our numerous internal sources. Our healthy human cells are sourced from peripheral blood, bone marrow, cord blood, fetal liver, amniotic/placental fluid, adipose, dental pulp and skin to mention a few.

Donor Criteria

Each donor is pre-screened for general health, HIV and Hepatitis B and C. In addition to being aware that their blood and/or tissue will be used for medical research purposes, all of our donors sign an IRB approved informed consent form. Procurement involves complete anonymity for the individual who is donating. Random generated numbers are used to track our blood and tissue specimens and there are no identifiers that can be traced back to the donor. HIPPA guidelines are strictly adhered to which protects the donor's privacy.

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ORDERING & DELIVERY INFORMATION

Contact Information

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Fax 530.626.7900
Email info@stemexpress.com
Website www.stemexpress.com

Address

778 Pacific Street
 Placerville, CA 95667

Office Hours

Monday through Friday
 8:00am to 5:00pm PST

Lead Times

Product	Fresh	Frozen
Peripheral Blood Leuko Paks and Leuko Pak Derivatives	2 weeks	
Bone Marrow	2 weeks	1-2 days
Cord Blood	1 week	
Tissue	1 week	

ORDERING & DELIVERY INFORMATION

Cell Type	Fresh	Cryopreserved	Delivery Method
Whole Tissue	Collected into a conical tube with RPMI 1640 and shipped ambient	Shipped on dry ice	<p><i>Delivery is based on the client's needs. A variety of options, including same day delivery by courier and FedEx overnight are available.</i></p>
Plasma/Platelets	Shipped ambient	Snap frozen and shipped on dry ice	
Whole Blood	Drawn into a blood bag or collection tubes and shipped ambient	N/A	
RBC	Collected into a 50mL conical tube with DPBS + 10% FBS and shipped on wet ice	N/A	
Mononuclear Cells	Collected into a 50mL conical tube with DPBS + 10% FBS + 2mM EDTA and shipped on wet ice	Frozen cells are stored in CryoStor CS10 in the vapor phase of liquid nitrogen and shipped on dry ice	
Purified Cells	Collected into a 50mL conical tube with DPBS + 10% FBS + 2mM EDTA and shipped on wet ice	Frozen cells are stored in CryoStor CS10 in the vapor phase of liquid nitrogen and shipped on dry ice	
Leuko Pak	Collected undiluted into 1L bag shipped ambient	N/A	
Cultured Cells	Cells are cultured and transferred in a Corning T25	Frozen cells are stored in CryoStor CS10 in the vapor phase of liquid nitrogen and shipped on dry ice	

This information is intended to present a general idea of our standard procedures. However, there are multiple options available depending on your specific needs. Please contact us for more information or if you are interested in an option that is not listed above.

ORDERING & DELIVERY INFORMATION

Every cell product package contains a **Certificate of Analysis**

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 Web: www.stemexpress.com

Certificate of Analysis

Catalog Number: PB0804C

Product Name: 40 Million Cryopreserved Peripheral Blood CD14+, Single Donor

Lot Number: 1000604

Date of Cryopreservation: 3/20/13

Donor Information

Age	Gender	Height	Weight	Ethnicity	Smoker
21	Male	193cm	86kg	Caucasian	Non-smoker

Infectious Disease Screening

HIV	Negative
HBV	Negative
HCV	Negative

Analyses

Test performed	Acceptable Range	Result
Number of Cells per Vial	300x10 ⁶	Pass
Viability by flow cytometer	>80%	98.8%
Purity by flow cytometer		98.1%

Products are guaranteed free of Mycoplasma, Yeast, Bacteria, and Fungi

Terms and Conditions

All products received from StemExpress, LLC are intended exclusively for *in vitro* use only. These products are not intended for use on human beings. Please note that any use of StemExpress, LLC products for any purpose other than intended including use for therapeutic or diagnostic purposes will result in legal ramifications. By your acceptance of these products, you acknowledge that you will treat them as potentially biologically hazardous specimens regardless of Infectious Disease Screening results and follow appropriate universal precautions. Full terms and conditions can be found at <http://www.stemexpress.com/terms-conditions/>.

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ORDERING & DELIVERY INFORMATION

Every purified cell product package contains a **FACS Analysis Report**
 Below is a sample FACS Analysis Report for CD14+ Monocytes. The purity and viability of the cells are shown at the bottom of the graphs. Samples were collected on a Miltenyi MACSQuant.

SHIP TO:

Attn: Client Name
 Address: Client Address

 Email: Client Email
 Phone: Client Phone
 Shipping Addr: Account Owner
 Acc # : Account Number
 Tracking #: Tracking Number
 Shipping Method: Shipping Method
 Date: Date of Shipment

PB-~~I~~CD14+ Viability and Purity Summary

Item #	Description	Quantity	Lot #	Qty	Viability	Purity
PB0804C PB- I CD14+	(cryopreserved)	40x10 ⁶ cells	1000604	1 vial	98.8%	98.1%

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GENERAL PRODUCT INFORMATION

Cell Separation

Purified primary cells are isolated by positive or negative separations using immunomagnetic MicroBead labeling systems.

Microbeads are superparamagnetic particles conjugated to highly specific antibodies or proteins. Labeling does not affect viability or function of the cells. In addition, these particles have no known effect on structure and do not interfere with subsequent experiments. MicroBeads are biodegradable and typically detach from the cells within a few days of cell culture.

Positive Selection: Cells of interest are directly labeled with MicroBeads and are isolated as the magnetically retained fraction. This is the most direct and specific method of isolating target cells from heterogeneous cell suspensions.

We guarantee that positively-selected cells have a purity of greater than or equal to 90%, unless otherwise specified.

Negative Selection: Negatively selected or untouched cells are isolated by labeling and depleting unwanted cells by immunomagnetic separation. The non-magnetic, unlabeled fraction contains the target cells.

Untouched cells are less likely to be activated by antibodies. We guarantee that the cell purity is greater than or equal to 85%, unless otherwise specified.

Cell Formats

Primary Cells: StemExpress provides a wide range of primary hematopoietic and immunological cells, which are available from numerous sources, including peripheral blood (PB), bone marrow (BM), cord blood (CB), and fetal liver (FL). Primary hematopoietic and immunological cells have a limited life span in vitro.

StemExpress primary cells are available in fresh and frozen (cryopreserved)* formats.

Celllysate and Cell Pellet products are meant for DNA/RNA studies and are not meant for cell culture applications. Please refer to our fresh or frozen products if live cells are required.

Celllysates and Cell Pellets are available by request only.

*Please note that the viability of frozen cells after thaw is normally between the ranges of 80-98%.

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LABORATORY SERVICES

Human Primary Cell Isolation

Our laboratory isolates and cultures human primary cells from peripheral blood, bone marrow, umbilical cord blood, and other human tissues using a variety of techniques, including immunomagnetic separation. These cells are available in fresh suspensions or cryopreserved. We ensure the viability and purity of every sample using phenotypic characterization by flow cytometry and morphological analysis. We also provide genomic DNA, RNA and cDNA from any sample. Additionally, StemExpress can conduct contract research such as cell assays and flow cytometric analysis.

Flow Cytometry Services

Flow cytometry is a method of cell quantification and enumeration. Utilizing the latest techniques in multisample and multiparameter analysis, we offer fast and accurate phenotypic assessment of your cell culture, including viability and purity.	Immunophenotyping -B (CD19, CD20) -T (CD3, CD4, CD8) -NK (CD56) -Monocytes (CD14, CD16) -Granulocytes (CD16, CD66b, CD123) -Dendritic Cells (BDCA4+, CD11c, CD83)	DNA quantitation and viability -Cell cycle analysis/DNA synthesis -Total DNA content -Apoptosis -Viability -Intracellular signaling/protein/enzyme activity
-Analysis of a variety of cell types, including rare cell populations	Phenotyping for cell culture/tissue transplant verification	-Transcription factors
-Fluorochrome-conjugated antibody compatible	-MSC phenotype	-Fluorogenic substrates
-Volumetric cell counting	-Endothelial Progenitor Cell phenotyping	-Cytokines
-3 laser, 9 simultaneous color capability	-Hematopoietic Stem Cell phenotyping	-Total protein
	-HLA typing	*Please contact us for custom analysis

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PRODUCTS OVERVIEW

Human Primary Cells

Peripheral Blood

- B Cells
- Mononuclear Cells
- Monocytes
- Natural Killer Cells
- Neutrophils
- Plasma
- Stem/Progenitor Cells
- T Cells

Cord Blood

- Umbilical Vascular Endothelial Cells

Fetal Liver

- Early Erythroid Progenitor Cells
- Mononuclear Cells
- Fetal Liver Stem/Progenitor Cells
- Stromal Cells
- Unprocessed Fetal Liver

Bone Marrow

- Endothelial
- Mesenchymal Stem Cells
- Myeloid Cells
- Mononuclear Cells
- Stem/Progenitor Cells

Blood & Tissue Collection

Blood

- Whole Blood
- Maternal Blood
- Paternal Blood
- Umbilical Cord Blood
- Custom Isolations
- Leukapheresis

Bone Marrow

- Whole Bone Marrow
- Plasma

Umbilical Cord Placental Tissue

- Wharton's Jelly

Human Adult Tissue

- Adipose
- Diseased
- Healthy
- Cadaverous
- Numerous other tissues available

Human Fetal Tissue

- Placental
- Chorionic Villi
- Liver
- Dermal
- Umbilical Cord
- Vasculature
- Pancreas
- Numerous other tissues available

Let us customize your cell isolations!

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CUSTOM PRODUCTS

StemExpress offers a variety of customized products and services. If you would like information about an item that is not listed in our catalog, please contact us.

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Examples of some custom products include but are not limited to:

Adipose - Mesenchymal Stem Cells: Adipose mesenchymal stem cells (AD-MSK) are isolated from lipoaspirates by collagenase digestion and subsequently cultured. AD-MSKs are cultured up to the third passage and harvested. Cultured AD-MSK cells are CD73, CD90 and CD105 positive in addition to being CD14, CD34, CD45 and HLA-DR negative.

Peripheral Blood - Mature Erythrocytes (RBCs):Peripheral Blood Mature Erythrocytes (PB-RBC), commonly referred to as red blood cells, are isolated from normal peripheral blood by centrifugation.

Fallopian Tube - Mesenchymal Stem Cells:Fallopian Tube Mesenchymal Stem Cells (FT-MSc) are derived from cultured whole fallopian tube tissue samples. The tissue is processed to increase surface area and encourage cellular migration. FT-MSCs are cultured up to the third passage and harvested. Cultured FT-MSc express CD90 and CD105 in addition to being CD14, CD34 and CD45 negative.

Whole Amniotic Fluid:Whole fluid is collected pre-term from all types of pregnancies at varying gestations. Procurement involves complete anonymity for the patients who are donating. We utilize random generated numbers to track our individual donor specimens and there are no identifiers that can be traced back to the donors. Samples can be provided from 2cc- 5cc per donor, whole or in a client specified media.

- Peripheral Blood - BDCA4+ Lymphoid/Plasmacytoid Dendric Cells
- Bone Marrow - Neutrophils
- Bone Marrow - CD138+ Plasma Cells
- Amniotic Fluid - Mesenchymal Stem Cells
- Dental Pulp - Mesenchymal Stem Cells
- Wharton’s Jelly - Mesenchymal Stem Cells
- DNA/RNA Isolation

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TISSUE PROCUREMENT

StemExpress has the largest variety of raw materials available in the industry.

Human tissues range from human fetal, adult, cadaverous, diseased samples and bone marrow. No other biotechnology company offers the vast variety of tissue types that we procure. All tissues are collected by StemExpress trained Procurement Technicians which allows us to quality control the procurement of the sample from beginning to end.

All protocols and consents are IRB approved

Human Adult Tissue

- Adipose
- Diseased
- Healthy
- Numerous other tissues available

Bone Marrow

- Fresh
- Frozen

Human Fetal Tissue

- Dermal
- Umbilical Cord
- Vasculature
- Pancreas
- Placental
- Chorionic Villi
- Liver
- Numerous other tissues available

Neonatal Tissue

- Umbilical Cord
- Placenta
- Wharton’s Jelly

Cadaverous Tissue

- Liver
- Muscle

- Isolated

- Kidney
- Numerous other tissues available

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UMBILICAL CORD BLOOD

CD3+ PAN T CELLS

Umbilical Cord Blood CD3+ Pan T Cells (CB-CD3) are negatively selected from cord blood mononuclear cells leaving purified, untouched Pan T Cells.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	CB1000F	10 million/vial	\$554
	CB1001F	20 million/vial	\$1,108
	CB1002F	25 million/vial	\$1,386
Cryopreserved	CB1000C	10 million/vial	\$476
	CB1001C	15 million/vial	\$699
	CB1002C	25 million/vial	\$1,191

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UMBILICAL CORD BLOOD

CD4+ CD45RA+ NAÏVE HELPER T CELLS

Umbilical Cord Blood CD4+CD45RA+ Naive Helper T Cells (CB-CD4/CD45RA) are isolated in a two-step process. First, CD4+ cells are negatively selected from cord blood mononuclear cells. CD45RO+ cells are then depleted from the CD4+ pool leaving the purified, untouched CD4+CD45RA+ Naive T Cells.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	CB1200F	5 million/vial	\$685
	CB1201F	10 million/vial	\$983
	CB1202F	20 million/vial	\$1,463
	CB1203F	25 million/vial	\$1,784
Cryopreserved	CB1200C	5 million/vial	\$577
	CB1201C	10 million/vial	\$853
	CB1202C	15 million/vial	\$1,361
	CB1203C	25 million/vial	\$1,660

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UMBILICAL CORD BLOOD

CD4+ HELPER T CELLS

Umbilical Cord Blood CD4+ Helper T Cells (CB-CD4) are negatively selected from cord blood mononuclear cells leaving purified, untouched CD4+ Helper T Cells.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	CB1100F	10 million/vial	\$554
	CB1101F	20 million/vial	\$1,108
	CB1002F	25 million/vial	\$1,386
Cryopreserved	CB1100C	10 million/vial	\$435
	CB1101C	15 million/vial	\$669
	CB1102C	25 million/vial	\$1,086

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UMBILICAL CORD BLOOD

CD8+ CYTOTOXIC T CELLS

Umbilical Cord Blood CD8+ Cytotoxic T Cells (CB-CD8) are negatively selected from cord blood mononuclear cells leaving purified, untouched CD8+ Cytotoxic T Cells.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	CB1300F	5 million/vial	\$807
	CB1301F	10 million/vial	\$1,605
	CB1302F	20 million/vial	\$3,227
	CB1303F	25 million/vial	\$4,038
Cryopreserved	CB1300C	5 million/vial	\$696
	CB1301C	10 million/vial	\$1,391
	CB1302C	20 million/vial	\$2,782
	CB1303C	25 million/vial	\$3,468

UMBILICAL CORD BLOOD

CD8+CD45RA+ NAIVE HELPER T CELLS

Umbilical Cord Blood CD8+CD45RA+ Naive Helper T Cells (CB-CD8/CD45RA) are isolated in a two-step process. First, CD8+ cells are negatively selected from cord blood mononuclear cells. CD45RO+ cells are then depleted from the CD4+ pool leaving the purified, untouched CD8+CD45RA+ Naive T Cells.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	CB1320F	5 million/vial	\$725
Cryopreserved	CB1320C	5 million/vial	\$615

UMBILICAL CORD BLOOD

CD14+ MONOCYTES

Umbilical Cord Blood CD14+ Monocytes (CB-CD14) are positively selected using immunomagnetic anti-CD14 microbeads from cord blood mononuclear cells.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	CB0800F	5 million/vial	\$741
	CB0801F	10 million/vial	\$1,482
	CB0802F	20 million/vial	\$2,964
Cryopreserved	CB0800C	5 million/vial	\$681
	CB0801C	10 million/vial	\$1,361
	CB0802C	20 million/vial	\$2,721

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UMBILICAL CORD BLOOD

CD19+ B CELLS

Umbilical Cord Blood CD19+ B Cells (CB-CD19) are positively selected using immunomagnetic anti-CD19 microbeads from cord blood mononuclear cells.

Format	Catalog #	QTY/Unit	Price/Unit
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Fresh	CB0300F	5 million/vial	\$731
Cryopreserved	CB0300C	5 million/vial	\$696

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UMBILICAL CORD BLOOD

CD34+ STEM/PROGENITOR CELLS

Umbilical Cord Blood CD34+ Stem/Progenitor Cells (CB-CD34) are positively selected using immunomagnetic anti-CD34 microbeads from cord blood mononuclear cells. Single donor.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	CB0150F	0.5 million/vial	\$583
	CB0151F	1 million/vial	\$1,166
	CB0152F	2 million/vial	\$2,332
	CB0153F	2.5 million/vial	\$2,915
Cryopreserved	CB0150C	0.5 million/vial	\$583
	CB0151C	1 million/vial	\$1,166
	CB0152C	2 million/vial	\$2,332
	CB0153C	2.5 million/vial	\$2,915

UMBILICAL CORD BLOOD

CD34+ STEM/PROGENITOR CELLS

Umbilical Cord Blood CD34+ Stem/Progenitor Cells (CB-CD34) are positively selected using immunomagnetic anti-CD34 microbeads from cord blood mononuclear cells. Mixed donor isolations are a combination of two or more donors and are available in larger lots.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	CB0100F	0.5 million/vial	\$523
	CB0101F	1 million/vial	\$1,045
	CB0102F	2 million/vial	\$2,090
	CB0103F	5 million/vial	\$3,930
Cryopreserved	CB0100C	0.5 million/vial	\$512
	CB0101C	1 million/vial	\$1,026
	CB0102C	2 million/vial	\$2,051
	CB0103C	5 million/vial	\$3,850

UMBILICAL CORD BLOOD

CD34 DEPLETED MONONUCLEAR CELLS

Umbilical Cord Blood CD34+ Depleted Mononuclear Cells (CB-CD34dep) are isolated by depleting the CD34+ cells from mononuclear cells using immunomagnetic anti-CD34 microbeads. CD34+ Depleted Mononuclear Cells contain less than 0.1% CD34+ cells.

Format	Mixed Donor Catalog #	Single Donor Catalog #	QTY/Unit	Mixed Donor Price/Unit	Single Donor Price/Unit
Fresh	CB0200F	CB0250F	200 million/vial	\$552	\$614
	CB0201F	CB0251F	300 million/vial	\$829	\$921
Cryopreserved	CB0200C	CB0250C	200 million/vial	\$524	\$583
	CB0201C	CB0251C	300 million/vial	\$787	\$874

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UMBILICAL CORD BLOOD

CD36+ ERYTHROID PROGENITOR CELLS

Umbilical Cord Blood CD36+ Erythroid Progenitor Cells (CB-CD36) are derived from cultured cord blood CD34+ cells. First, CD34+ cells are positively selected using immunomagnetic anti-CD34 microbeads from cord blood mononuclear cells. The isolated CB-CD34+ cells are cultured in StemSpan™ SFEM, a serum-free expansion media for hematopoietic cells, supplemented with SCF, EPO and IL-3. Cultured cells are harvested after 10 days and CB-CD36+ cells are positively selected using immunomagnetic anti-CD36 microbeads.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	CB0400F	1 million/vial	\$763
	CB0401F	2 million/vial	\$1527

	CB0402F	2.5 million/vial	\$1908
Cryopreserved	CB0400C	1 million/vial	\$611
	CB0401C	2 million/vial	\$1,222
	CB0402C	2.5 million/vial	\$1,527

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UMBILICAL CORD BLOOD

CD56+ NATURAL KILLER CELLS

Umbilical Cord Blood CD56+ Natural Killer Cells (CB-CD56) are positively selected using immunomagnetic anti-CD56 microbeads from cord blood mononuclear cells.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	CB1400F	1 million/vial	\$732
	CB1401F	2 million/vial	\$1,463
	CB1402F	2.5 million/vial	\$1,829
Cryopreserved	CB1400C	1 million/vial	\$661
	CB1401C	2 million/vial	\$1,321
	CB1402C	2.5 million/vial	\$1,651

UMBILICAL CORD BLOOD

CD133+ STEM/PROGENITOR CELLS

Umbilical Cord Blood CD133+ Stem/Progenitor Cells (CB-CD133) are positively selected using immunomagnetic anti-CD133 microbeads from cord blood mononuclear cells. Mixed donor isolations are a combination of two or more donors and are available in larger lots.

Format	Mixed Donor Catalog #	Single Donor Catalog #	QTY/Unit	Mixed Donor Price/Unit	Single Donor Price/Unit
Fresh	CB0600F	CB0650F	0.5 million/vial	\$1,203	\$2,519
	CB0601F	CB0651F	1 million/vial	\$2,406	\$5,037
	CB0602F	CB0652F	2 million/vial	\$4,811	\$10,074
	CB0603F	CB0653F	2.5 million/vial	\$6,014	\$12,593
Cryopreserved	CB0600C	CB0650C	0.5 million/vial	\$931	\$2,519
	CB0601C	CB0651C	1 million/vial	\$1,862	\$5,037
	CB0602C	CB0652C	2 million/vial	\$3,724	\$10,074
	CB0603C	CB0653C	2.5 million/vial	\$4,655	\$12,593

UMBILICAL CORD BLOOD

CD133 DEPLETED MONONUCLEAR CELLS

Umbilical Cord Blood CD133+ Depleted Mononuclear Cells (CB-CD133dep) are isolated by depleting the CD133+ cells from mononuclear cells using immunomagnetic anti-CD133 microbeads. CD133+ Depleted Mononuclear Cells contain less than 0.1% CD133+ cells. Mixed donor isolations are a combination of two or more donors and are available in larger lots.

Format	Mixed Donor Catalog #	Single Donor Catalog #	QTY/Unit	Mixed Donor Price/Unit	Single Donor Price/Unit
Fresh	CB0700F	CB0750F	150 million/vial	\$355	\$375
	CB0701F	CB0751F	200 million/vial	\$500	\$520
	CB0702F	CB0752F	300 million/vial	\$745	\$775
Cryopreserved	CB0700C	CB0750C	100 million/vial	\$340	\$360
	CB0701C	CB0751C	200 million/vial	\$480	\$500
	CB0702C	CB0752C	300 million/vial	\$720	\$750

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UMBILICAL CORD BLOOD

VENOUS ENDOTHELIAL CELLS (HUVEC)

Umbilical Cord Blood Venous Endothelial Cells (HUVECs) are isolated by collagenase digestion of single umbilical cord veins. Isolated cells are cultured and harvested in their second passage, although other passages are available upon request. Mixed donor isolations are a combination of two or more donors and are available in larger lots. Isolated HUVEC cultures are positive for CD31, CD54, CD62e, von Willebrand factor and DiI-Ac-LDL uptake.

Format	Mixed Donor Catalog #	Single Donor Catalog #	QTY/Unit	Price/Unit (Mixed)	Price/Unit (Single)
Fresh	CB0500F	CB0550F	2.0 million/vial	\$870	\$1,212
	CB0501F	CB0551F	2.5 million/vial	\$1,088	\$1,515

Cryopreserved	CB0500C	CB0500C	2.0 million/vial	\$696	\$969
	CB0501C	CB0551C	2.5 million/vial	\$870	\$1,212

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UMBILICAL CORD BLOOD

MONONUCLEAR CELLS

Umbilical Cord Blood Mononuclear Cells (CB-MNC) are isolated from whole blood using density gradient centrifugation.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	CB0001F	15 million/vial	\$145
	CB0002F	50 million/vial	\$467
	CB0003F	150 million/vial	\$797
Cryopreserved	CB0001C	15 million/vial	\$132
	CB0002C	50 million/vial	\$425
	CB0003C	150 million/vial	\$725

UMBILICAL CORD BLOOD

NEUTROPHILS

Umbilical Cord Blood Neutrophils (CB-Neutrophils) are isolated from whole cord blood in a multistep process. First, whole cord blood is treated with HetaSep to deplete red blood cells. Granulocytes are further enriched via density gradient centrifugation and processed to remove remaining red blood cells. Finally, neutrophils are negatively selected from enriched cord blood granulocytes leaving purified, untouched cord blood neutrophils.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	CB1500F	40 million/vial	\$760
	CB1501F	50 million/vial	\$950
Cryopreserved	CB1500C	40 million/vial	\$570
	CB1501C	50 million/vial	\$690

UMBILICAL CORD BLOOD

PLASMA

Umbilical Cord Blood Plasma (CB-Plasma) is isolated from whole umbilical cord blood by centrifugation. As a result, there is a reduced platelet count in the harvested plasma. Cryopreserved plasma is snap frozen in a -20°C freezer then moved to a -80°C freezer for long term storage.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	CB0900F	10 mL	\$98
	CB0901F	20 mL	\$138
	CB0902F	30 mL	\$171
	CB0903F	40 mL	\$204
	CB0904F	50 mL	\$228
Cryopreserved	CB0900C	10 mL	\$76
	CB0901C	20 mL	\$116
	CB0902C	30 mL	\$149
	CB0903C	40 mL	\$195
	CB0904C	50 mL	\$204

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UMBILICAL CORD BLOOD

WHOLE BLOOD

Umbilical Cord Blood

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	CB0910F	80 - 100 mL	\$400

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PERIPHERAL BLOOD

CD3+ PAN T CELLS

Peripheral Blood CD3+ Pan T Cells (PB-CD3) are negatively selected from peripheral blood mononuclear cells leaving purified, untouched Pan T Cells.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	PB1000F	20 million/vial	\$741
	PB1001F	30 million/vial	\$1,110
Cryopreserved	PB1000C	20 million/vial	\$636
	PB1001C	40 million/vial	\$1,175

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PERIPHERAL BLOOD

CD4+ CD45RA+ NAÏVE HELPER T CELLS

Peripheral Blood CD4+CD45RA+ Naïve Helper T Cells (PB-CD4/CD45RA) are isolated in a two-step process. First, CD4+ cells are negatively selected from peripheral blood mononuclear cells. CD45RO+ cells are then depleted from the CD4+ pool leaving the purified, untouched CD4+ CD45RA+ Naïve T Cells.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	PB1200F	5 million/vial	\$932
Cryopreserved	PB1200C	5 million/vial	\$817

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PERIPHERAL BLOOD

CD4+ CD45RO+ MEMORY T CELLS

Peripheral Blood CD4+ CD45RO+ Memory T Cells (PB-CD4/CD45RO) are isolated in a two-step process. First, Helper T cells are negatively selected from peripheral blood mononuclear cells. CD45RA+ cells are then depleted from the untouched CD4+ Helper T Cell population leaving the purified, untouched CD4+ CD45RO+ Memory T Cells.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	PB2500F	5 million/vial	\$932
Cryopreserved	PB2500C	5 million/vial	\$874

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PERIPHERAL BLOOD

CD4+ HELPER T CELLS

Peripheral Blood CD4+ Helper T Cells (PB-CD4) are negatively selected from peripheral blood mononuclear cells leaving purified, untouched CD4+ Helper T Cells.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	PB1100F	10 million/vial	\$494
	PB1101F	15 million/vial	\$741
Cryopreserved	PB1100C	10 million/vial	\$425
	PB1101C	15 million/vial	\$638

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PERIPHERAL BLOOD

CD4+ CD25+ REGULATORY T CELLS

Peripheral Blood CD4+ CD25+ Regulatory T Cells (PB-CD4/CD25) are isolated in a two-step process. First, CD4+ cells are negatively selected from peripheral blood mononuclear cells. Then CD25+ cells are positively selected using immunomagnetic anti-CD25 microbeads from the untouched CD4+ Helper T population.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	PB2400F	2 million /vial	\$889
Cryopreserved	PB2400C	2 million /vial	\$778

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PERIPHERAL BLOOD

CD8+ CYTOTOXIC T CELLS

Peripheral Blood CD8+ Cytotoxic T Cells (PB-CD8) are negatively selected from peripheral blood mononuclear cells leaving purified, untouched CD8+ Cytotoxic T Cells.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	PB1300F	10 million/vial	\$741
Cryopreserved	PB1300C	10 million/vial	\$638

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PERIPHERAL BLOOD

CD8+ CD45RA+ NAÏVE CYTOTOXIC T CELLS

Peripheral Blood CD8+CD45RA+ Naïve Cytotoxic T Cells (PB-CD8/CD45RA) are isolated in a two-step process. First, Cytotoxic T cells are negatively selected from peripheral blood mononuclear cells. CD45RO+ cells are then depleted from the untouched CD8+ Cytotoxic T Cell population leaving the purified, untouched CD8+ CD45RA+ Naïve Cytotoxic T Cells.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	PB2600F	5 million /vial	\$915
Cryopreserved	PB2600C	5 million /vial	\$800

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PERIPHERAL BLOOD

CD14+ MONOCYTES

Peripheral Blood CD14+ Monocytes (PB-CD14) are negatively selected from peripheral blood mononuclear cells leaving purified, untouched CD14+ Monocytes. Positively selected monocytes are available as a custom order.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	PB0800F	10 million/vial	\$882
	PB0801F	20 million/vial	\$1,764
	PB0802F	40 million/vial	\$3,527
Cryopreserved	PB0800C	10 million/vial	\$760
	PB0801C	20 million/vial	\$1,519
	PB0802C	40 million/vial	\$3,037

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PERIPHERAL BLOOD

CD19+ B CELLS

Peripheral Blood CD19+ B Cells (PB-CD19) are negatively selected from peripheral blood mononuclear cells leaving purified, untouched CD19+ B Cells. Positively selected B cells are available as a custom order.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	PB0300F	10 million/vial	\$915
Cryopreserved	PB0300C	10 million/vial	\$760

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PERIPHERAL BLOOD

CD19+ CD27+ MEMORY B CELLS

Peripheral Blood CD19+ CD27+ Memory B Cells (PB-CD19/CD27) are isolated in a two-step process. First, B cells are negatively selected from peripheral blood mononuclear cells. Then CD27+ cells are positively selected using immunomagnetic anti-CD27 microbeads from the untouched CD19+ B Cell population, leaving highly purified CD19+ CD27+ Memory B Cells.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	PB1700F	0.5 million/vial	\$932
	PB1701F	1 million/vial	\$1,864
	PB1702F	2 million/vial	\$3,728
	PB1703F	5 million /vial	\$9,320
Cryopreserved	PB1700C	0.5 million/vial	\$816
	PB1701C	1 million/vial	\$1,631
	PB1702C	2 million/vial	\$3,261
	PB1703C	5 million /vial	\$8,151

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PERIPHERAL BLOOD

CD19+ IgD+ NAÏVE B CELLS

Peripheral Blood CD19+IgD+ Naïve B Cells (PB-CD19/IgD) are isolated in a single-step process that depletes non-B Cells while depleting CD27+ Memory B Cells leaving the purified, untouched CD19+ IgD+ Naïve B Cells.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	PB1600F	0.5 million/vial	\$551
	PB1601F	1 million/vial	\$1,100
	PB1602F	2 million/vial	\$2,199
	PB1603F	5 million /vial	\$5,496
Cryopreserved	PB1600C	0.5 million/vial	\$535
	PB1601C	1 million/vial	\$1,071
	PB1602C	2 million/vial	\$2,142
	PB1603C	5 million /vial	\$5,354

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PERIPHERAL BLOOD

CD34+ STEM/PROGENITOR CELLS

Peripheral Blood CD34+ Stem/Progenitor Cells (PB-CD34) are positively selected using immunomagnetic anti-CD34 microbeads from peripheral blood mononuclear cells.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	PB0100F	0.2 million/vial	\$813
	PB0101F	0.5 million/vial	\$1,895
	PB0102F	1 million/vial	\$3,311
Cryopreserved	PB0100C	0.2 million/vial	\$765
	PB0101C	0.5 million/vial	\$1,832
	PB0102C	1 million/vial	\$2,292

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PERIPHERAL BLOOD

CD36+ ERYTHROID PROGENITOR CELLS

Peripheral Blood CD36+ Erythroid Progenitor Cells (PB-CD36) are derived from peripheral blood CD34+ cells. First, CD34+ cells are positively selected using immunomagnetic anti-CD34 microbeads from peripheral blood mononuclear cells. The isolated PB-CD34+ cells are cultured in StemSpan™ SFEM a serum-free expansion media for hematopoietic cells, supplemented with SCF, EPO and IL-3. Cultured cells are harvested after 10 days and PB-CD36+ cells are positively selected using immunomagnetic anti-CD36 microbeads.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	PB0400F	1 million/vial	\$720
	PB0401F	2.5 million/vial	\$1800
Cryopreserved	PB0400C	1 million/vial	\$660
	PB0401C	2.5 million/vial	\$1575

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PERIPHERAL BLOOD

CD56+ NATURAL KILLER CELLS

Peripheral Blood CD56+ Natural Killer Cells (PB-CD56) are negatively selected from peripheral blood mononuclear cells leaving purified, untouched CD56+ Natural Killer Cells. Positively selected natural killer cells are available as a custom order.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	PB1400F	5 million/vial	\$882
Cryopreserved	PB1400C	5 million/vial	\$760

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PERIPHERAL BLOOD

BASOPHILS

Peripheral Blood Basophils (PB-Basophils) are isolated from whole peripheral blood in a multistep process. Whole peripheral blood is treated with HetaSep to deplete red blood cells. Then, basophils are negatively selected from the enriched leukocytes leaving

purified, untouched peripheral blood basophils.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	PB1800F	0.2 million/vial	\$609
	PB1801F	0.3 million/vial	\$915
Cryopreserved	PB1800C	0.2 million/vial	\$533
	PB1801C	0.3 million/vial	\$800

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PERIPHERAL BLOOD

EOSINOPHILS

Peripheral Blood Eosinophils (PB-Eosinophils) are isolated from whole peripheral blood in a multistep process. First, whole peripheral blood is treated with HetaSep to deplete red blood cells. Granulocytes are further enriched via density gradient centrifugation and processed to remove remaining red blood cells. Finally, eosinophils are negatively selected from enriched peripheral blood granulocytes leaving purified, untouched peripheral blood eosinophils.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	PB2100F	1 million cells	\$915
Cryopreserved	PB2100C	1 million cells	\$800

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PERIPHERAL BLOOD

MONOCYTE-DERIVED IMMATURE MYELOID DENDRITIC CELLS

Peripheral Blood Monocyte-Derived Dendritic Cells (PB-MoDC) are derived from negatively selected monocytes. The untouched monocytes are cultured for 4 - 5 days with 10% FBS in the presence of GM-CSF and IL-4. Cultured Monocyte-derived dendritic cells do not express CD14, while expressing CD11c, HLA-DR and weakly expressing CD83.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	PB2000F	1.5 million/vial	\$688
Cryopreserved	PB2000C	1.5 million/vial	\$539

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PERIPHERAL BLOOD

MONOCYTE-DERIVED MACROPHAGES

Peripheral Blood Monocyte-Derived Macrophages (PB-MoMΦ) are derived from negatively selected monocytes. The untouched monocytes are cultured for 4 - 5 days with 10% FBS in the presence of M-CSF and IL-4. Cultured Monocyte-derived macrophages express CD11b, CD18, CD68 and HLA-DR.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	PB2200F	1.5 million cells	\$720
Cryopreserved	PB2200C	1.5 million cells	\$571

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PERIPHERAL BLOOD

MONONUCLEAR CELLS

Peripheral Blood Mononuclear Cells (PB-MNC) are isolated from whole blood using density gradient centrifugation.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	PB0001F	15 million/vial	\$125
	PB0002F	25 million/vial	\$182
	PB0003F	50 million/vial	\$258
	PB0004F	100 million/vial	\$400
	PB0005F	300 million/vial	\$810
Cryopreserved	PB0001C	15 million/vial	\$112
	PB0002C	25 million/vial	\$164
	PB0003C	50 million/vial	\$232
	PB0004C	100 million/vial	\$361
	PB0005C	300 million/vial	\$729

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PERIPHERAL BLOOD

LEUKO PAK

Normal peripheral blood mononuclear cells are collected from healthy donors. For the Full Leuko Pak, approximately three blood volumes are processed using the Spectra Optia® Apheresis System and between 200-300mL of plasma can be collected at the same time as the mononuclear cells.

Format	Catalog #	QTY/Unit	Price/Unit
Normal PB Leuko Pak	LE1003F	1/4 Bag Range: 1 to 3.5x10 ¹⁰	\$1,495
	LE1002F	1/2 Bag Range: 1 to 3.5x10 ¹⁰	\$1,795
	LE1001F	1 Bag Range: 1 to 3.5x10 ¹⁰	\$2,775

PERIPHERAL BLOOD PLASMA

Peripheral Blood Plasma (PB-Plasma) is either fractionated from a whole blood bag by centrifugation or is collected on the Spectra Optia® Apheresis System at the same time as a mononuclear cell collection. The harvested plasma contains a reduced platelet count.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	PB0900F	10 mL	\$99
	PB0901F	20 mL	\$139
	PB0902F	30 mL	\$172
	PB0903F	40 mL	\$206
	PB0904F	50 mL	\$228
	PB0905F	100 mL	\$288
	PB0906F	150 mL	\$343
Cryopreserved	PB0907F	300 mL	\$525
	PB0900C	10 mL	\$77
	PB0901C	20 mL	\$117
	PB0902C	30 mL	\$151
	PB0903C	40 mL	\$184
	PB0904C	50 mL	\$206
	PB0905C	100 mL	\$266
	PB0906C	150 mL	\$322
	PB0907C	300 mL	\$500

PERIPHERAL BLOOD

WHOLE BLOOD

Peripheral Blood Whole (PB) is collected in sterile systems containing either ACD:A, EDTA or CP2D anticoagulants according to customer specifications. Our standard anticoagulant is CP2D, with 63mL CP2D per bag, intended for 500mL draws. Please contact us for custom orders. Whole blood may be collected in vacutainer tubes with custom anticoagulants, syringes or transfer packs to accommodate low volume draws.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	PB2700F	10 mL	\$115
	PB2701F	50 mL	\$240
	PB2702F	100 mL	\$360
	PB2703F	150 mL	\$420
	PB2704F	250 mL	\$480
	PB2705F	500 mL	\$600
Cryopreserved	PB2700C	10 mL	\$100
	PB2701C	50 mL	\$210
	PB2702C	100 mL	\$330
	PB2703C	150 mL	\$390
	PB2704C	250 mL	\$450
	PB2705C	500 mL	\$570

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PERIPHERAL BLOOD

WHOLE BLOOD VACUTAINER TUBE COLLECTION

Peripheral Blood Whole (PB) is collected in 10mL sterile vacutainer(s) containing ACD:A, EDTA or Heparin anticoagulants according to customer specifications. (Streck tubes available @ an additional \$10.00 per 10mL tube)

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	PB2711F	10 mL	\$115
	PB2712F	20 mL	\$150
	PB2713F	30 mL	\$185
	PB2714F	40 mL	\$220
	PB2715F	50 mL	\$255
	PB2716F	60 mL	\$290
	PB2717F	70 mL	\$325
	PB2718F	80 mL	\$360
	PB2719F	90 mL	\$395
	PB2720F	100 mL	\$430

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PERIPHERAL BLOOD

MATERNAL BLOOD / MATERNAL BLOOD PLASMA

Maternal Blood - Maternal blood samples are collected from all types of pregnancies at varying gestations and demographics. Samples can be provided from a minimum of 20cc up to a maximum of 60cc per donor. Different types of blood collection tubes are per request with the most popular being Streck, ACD-A and EDTA.

Maternal Blood Plasma - Maternal Blood Plasma is fractionated from a whole blood bag by centrifugation and supplied in a 50mL conical tube.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	MB2700F	10 mL	\$340
	MB2701F	20 mL	\$355
	MB2702F	30 mL	\$370
	MB2703F	40 mL	\$385
	MB2704F	50 mL	\$400
	MB2705F	60 mL	\$415

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	MB0950F	10 mL	\$450
	MB0951F	20 mL	\$480
	MB0952F	30 mL	\$510
Cryopre-served	MB0950C	10 mL	\$425
	MB0951C	20 mL	\$440
	MB0952C	30 mL	\$485

Infectious Disease Screening and special non-profit or volume pricing are available upon request.

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FETAL LIVER

CD34+ STEM/PROGENITOR CELLS

Fetal Liver CD34+ Stem/Progenitor Cells (FL-CD34) are positively selected from homogenized liver tissue. First, fetal liver tissue is enzymatically digested and further processed to generate a leukocyte-rich suspension. CD34+ cells are then positively selected from the leukocyte-rich suspension using immunomagnetic anti-CD34 microbeads, leaving highly purified fetal liver CD34+ cells.

Format	Catalog #	QTY/Unit	Price Unit
Fresh	FL0001F	0.5 million/vial	\$610
	FL0002F	1 million/vial	\$1,220
	FL0003F	2 million/vial	\$2,240
Cryopreserved	FL0001C	0.5 million/vial	\$488
	FL0002C	1 million/vial	\$977
	FL0003C	2 million/vial	\$1,954

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FETAL LIVER

CD36+ ERYTHROID PROGENITOR CELLS

Fetal Liver CD36+ Erythroid Progenitor Cells (FL-CD36) are derived from fetal liver CD34+ cells. First, CD34+ cells are positively selected using immunomagnetic anti-CD34 microbeads from fetal liver mononuclear cells. The isolated FL-CD34+ cells are cultured in StemSpan™ SFEM, a serum-free expansion media for hematopoietic cells, supplemented with SCF, EPO and IL-3. Cultured cells are harvested after 10 days and FL-CD36+ cells are positively selected using immunomagnetic anti-CD36 microbeads.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	FL0100F	1 million/vial	\$573
	FL0101F	2 million/vial	\$1,456
Cryopreserved	FL0100C	1 million/vial	\$546
	FL0101C	2 million/vial	\$1,091

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FETAL LIVER

CD133+ STEM/PROGENITOR CELLS

Fetal Liver CD133+ Stem/Progenitor Cells (FL-CD133) are positively selected from homogenized liver tissue. First, fetal liver tissue is enzymatically digested and further processed to generate a leukocyte-rich suspension. CD133+ cells are then positively selected from the leukocyte-rich suspension using immunomagnetic anti-CD133 microbeads, leaving highly purified fetal liver CD133+ cells.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	FL0300F	0.5 million/vial	\$3,031
	FL0301F	1 million/vial	\$6,062
	FL0302F	2 million/vial	\$12,124
Cryopreserved	FL0300C	0.5 million/vial	\$2,425
	FL0301C	1 million/vial	\$4,850
	FL0302C	2 million/vial	\$9,700
	FL0303C	5 million/vial	\$24,250

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FETAL LIVER

MONONUCLEAR CELLS

Fetal Liver – Mononuclear Cells (FL-MNCs) are isolated using our liver homogenization protocol. This population is free of red blood cells. Cryopreserved samples are stored in optimized medium for improved viability upon reanimation.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	FL0200F	5 million/vial	\$1,035
Cryopreserved	FL0200C	5 million/vial	\$986

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FETAL LIVER

STROMAL CELLS

Fetal Liver Mesenchymal Stem Cells (FL-MSC) are derived from cultured fetal liver mononuclear cells. First, fetal liver tissue is enzymatically digested and further processed to generate a leukocyte-rich suspension. Mononuclear cells are enriched from the leukocyte-rich suspension by a density gradient separation and subsequently cultured. Cultured fetal liver stromal cells have a fibroblast-like phenotype and express CD90 and CD105 in addition to being CD14, CD34 and CD45 negative.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	FL0400F	1 million/vial	\$966
	FL0401F	2 million/vial	\$1,932
Cryopreserved	FL0400C	1 million/vial	\$920
	FL0401C	2 million/vial	\$1,840

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BONE MARROW

CD33+ CD66+ MYELOID CELLS

Bone Marrow CD33+ CD66+ Myeloid Cells (BM-CD33/CD66) are positively selected using immunomagnetic anti-CD33 and anti-CD66 microbeads from bone marrow mononuclear cells.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	BM1900F	1 million/vial	\$699
	BM1901F	2 million/vial	\$750
	BM1902F	5 million/vial	\$800
Cryopreserved	BM1900C	1 million/vial	\$659
	BM1901C	2 million/vial	\$709
	BM1902C	5 million/vial	\$760

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BONE MARROW

CD34+ STEM/PROGENITOR CELLS

Bone Marrow CD34+ Stem/Progenitor Cells (BM-CD34) are positively selected using immunomagnetic anti-CD34 microbeads from bone marrow mononuclear cells.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	BM0100F	0.5 million/vial	\$533
	BM0101F	1 million/vial	\$860
	BM0102F	2 million /vial	\$2,149
Cryopreserved	BM0100C	0.5 million/vial	\$506
	BM0101C	1 million/vial	\$912
	BM0102C	2 million /vial	\$2,125

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BONE MARROW

CD34 DEPLETED MONONUCLEAR CELLS

Bone Marrow CD34+ Depleted Mononuclear Cells (PB-CD34dep) are isolated by depleting the CD34+ cells from peripheral blood mononuclear cells using immunomagnetic anti-CD34 microbeads. CD34 Depleted Mononuclear Cells contain less than 0.1% CD34+ cells.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	BM0200F	300 million /vial	\$943
Cryopreserved	BM0200C	300 million /vial	\$898

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BONE MARROW

CD36+ ERYTHROID PROGENITOR CELLS

Bone Marrow CD36+ Erythroid Progenitor Cells (BM-CD36) are derived from bone marrow CD34+ cells. First, CD34+ cells are positively selected using immunomagnetic anti-CD34 microbeads from bone marrow mononuclear cells. The isolated BM-CD34+ cells are cultured in StemSpan™ SFEM, a serum-free expansion media for hematopoietic cells, supplemented with SCF, EPO and IL-3. Cultured cells are harvested after 10 days and BM-CD36+ cells are positively selected using immunomagnetic anti-CD36 microbeads.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	BM0400F	1 million/vial	\$624
	BM0401F	2.5 million /vial	\$1,560
Cryopreserved	BM0400C	1 million/vial	\$594
	BM0401C	2.5 million /vial	\$1,485

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BONE MARROW

CD105+ ENDOTHELIAL CELLS

Bone Marrow CD105+ Endothelial Cells (BM-CD105) are positively selected using immunomagnetic anti-CD105 microbeads from bone marrow mononuclear cells.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	BM1800F	0.2 million cells	\$584
	BM1801F	0.3 million cells	\$862
Cryopreserved	BM1800C	0.2 million cells	\$554
	BM1801C	0.3 million cells	\$832

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BONE MARROW

CD133+ STEM/PROGENITOR CELLS

Bone Marrow CD133+ Stem/Progenitor Cells (BM-CD133) are positively selected using immunomagnetic anti-CD133 microbeads from bone marrow mononuclear cells.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	BM0600F	0.5 million/vial	\$1,137
	BM0601F	1 million/vial	\$2,273
	BM0602F	2 million/vial	\$4,545
	BM0603F	5 million/vial	\$11,362
Cryopreserved	BM0600C	0.5 million/vial	\$1,107
	BM0601C	1 million/vial	\$2,214
	BM0602C	2 million/vial	\$4,427
	BM0603C	5 million/vial	\$11,068

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BONE MARROW

MESENCHYMAL STEM CELLS

Bone Marrow Mesenchymal Stem Cells (BM-MSC) are derived from bone marrow mononuclear cells in the first culture passage. Cultured BM-MSC cells are CD73, CD90 and CD105 positive in addition to being CD14, CD34, CD45 and HLA-DR negative.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	BM0500F	1 million/vial	\$929
	BM0501F	2 million /vial	2,320
Cryopreserved	BM0500C	.75 million/vial	\$825
	BM0501C	2 million /vial	\$2,112

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BONE MARROW

MONONUCLEAR CELLS

Image provided by Miltenyi Biotec.

Bone Marrow Mononuclear Cells (BM-MNC) are isolated from whole bone marrow using density gradient centrifugation.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	BM0001F	100 million/vial	\$631
	BM0002F	25 million /vial	\$260
Cryopreserved	BM0001C	50 million/vial	\$590
	BM0002C	100 million /vial	\$625

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BONE MARROW

WHOLE BONE MARROW

Bone Marrow Whole (BM) is collected from the posterior iliac crest up to a maximum of four sites, 25mL per site. Bone marrow is drawn with a 30cc syringe and anticoagulated with Heparin.

Format	Catalog #	QTY/Unit	Price/Unit
Fresh	BM0900F	10 mL	\$383
	BM0901F	25 mL	\$833
	BM0902F	50 mL	\$1,618
	BM0903F	100 mL	\$2,945
Cryopreserved	BM0900C	10 mL	\$339
	BM0901C	25 mL	\$738
	BM0902C	50 mL	\$1,537
	BM0903C	100 mL	\$2,798

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2. The Client is deemed to agree to these conditions of sale and delivery upon acceptance of the good supplied.
3. Any rights awarded to the Client arising during the course of business with StemExpress, LLC are not transferable.
4. Any amendment to the conditions of sale and delivery, or any recognition of the Client's conflicting purchase conditions must be confirmed in writing by StemExpress, LLC.
5. This Agreement constitutes the entire and exclusive agreement between the parties.
6. This Agreement shall be governed by and interpreted under the laws of the State of California, and venue for any dispute arising hereunder shall be in the County of Sacramento.

7. The prevailing party in any action to enforce the terms of this Agreement shall be entitled to reimbursement by the other party for all costs, including the reasonable attorney fees and professional fees, incurred in connection with such proceeding.
8. Any donor information obtained by StemExpress, LLC is privileged, and StemExpress, LLC treats donor information as confidential in order to preserve the anonymity of the donor. StemExpress will provide Researcher with only minimal and non-privileged information regarding donors.

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1. StemExpress, LLC prices are subject to change without prior notice. Please contact us to confirm current pricing with StemExpress, LLC.
2. All shipping and handling charges will be reflected on the invoice upon the delivery of product. Shipping and handling charges will vary according to the weight of the package and the shipping options. Please contact StemExpress, LLC directly for current shipping and handling prices.

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Warranty:

1. StemExpress, LLC warrants that our products will meet the claimed product specifications, such as viability, number of viable cells, and purity. StemExpress, LLC does not warrant any biological properties associated with our products.
2. StemExpress, LLC will replace any products validated with flowcytontery that do not meet the specifications claimed on our certificate of analysis free of charge, or refund the purchase price. In no event shall StemExpress, LLC's liability exceed the purchase price paid by the Client.
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