

## Fresh Product

### Peripheral Blood Mobilized Leukopak, G-CSF + Plerixafor

Catalog#	MLE3PX4	3-Day Injection	Apheresis Day 4
	MLE3PX5	3-Day Injection	Apheresis Day 5
	MLE4PX5	4-Day Injection	Apheresis Day 5
	MLE4PX6	4-Day Injection	Apheresis Day 6
	MLE5PX6	5-Day Injection	Apheresis Day 6
	MLE5PX7	5-Day Injection	Apheresis Day 7

## Product Description

Peripheral Blood Mobilized Leukopaks are collected using the Spectra Optia<sup>®</sup> Apheresis System from healthy donors that are negative for HIV, HBV, and HCV. Mobilized Leukopaks are from donors that are injected with 10µg/kg/day Granulocyte-Colony Stimulating Factor (G-CSF) plus 240µg/kg of Plerixafor the day before collection, which stimulates the bone marrow to produce hematopoietic and progenitor stem cells and releases these cells into the bloodstream. Collections occur on day 4, 5, 6, or 7-post injection.

Cells are obtained using Institutional Review Board (IRB) approved consent forms and protocols.

## Sample Collection and Processing

All samples are collected on-site at the StemExpress Donation Center, or at nearby partner hospitals or clinics. Apheresis donors are transfused with ACD-A during the collection process. Samples are then quickly processed in our on-site laboratory to achieve maximum viability and quality.

Infectious disease testing for HIV, HBV, and HCV is performed on a sample of donor blood. Only samples with negative results within 90 days of collection are shipped unless approved by the customer. All testing is performed by a CLIA-certified lab.

## Format

Fresh Mobilized Leukopaks are shipped at ambient temperature unless otherwise specified from the customer.

## Storage

Fresh products should be used or processed immediately upon receipt. The warranty only covers items whose specifications are tested at the time they are received.

## Cell Counting Instructions

Important: This cell viability/counting step is required to ensure the quantity of cells provided. Be sure to count the cells before washing. Be aware that cell loss is expected and may be up to 30% during wash steps. Recovery rates vary depending on technique.

### Materials

- Cleaned hemocytometer
- Trypan Blue

### Protocol

1. Prepare an appropriate dilution of a well-mixed cell suspension from the Leukopak using PBS. We recommend starting with a 100-fold dilution.
2. Make a 1-in-2 dilution with 20µl each of well-mixed cell suspension and Trypan Blue.
3. Load one side of the hemocytometer, being careful not to over- or under-fill the chamber.
4. Count viable (clear, round, bright) and non-viable (blue, irregular shape, dull) cells in the four corner squares. Adjust your dilution if there are more than 100 cells/square.
5. Determine the number of total viable cells in the original sample. One square is equal to 100 nL.

Viability = live cells/all cells

Cell Concentration = Mean cells/square × Dilution Factor × 10<sup>4</sup>

Total Cell Count = Cell Concentration × Starting Volume

Total Viable Cell Count = Total Cell Count × Viability

## Warning

This product contains human tissue or other biological material and MUST be handled at Biosafety Level 2 or higher. All biological products should be treated as potentially infectious or contaminated material, even if infectious disease screening reports are negative. Follow universal precautions and wear appropriate personal protective equipment.

## Product Warranty

For our product warranty, please review our Terms and Conditions at [stemexpress.com/terms-and-conditions/](http://stemexpress.com/terms-and-conditions/).

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