

SIMPLIFY PBMC ISOLATION

Use SepMate™ to Isolate PBMCs in Just 15 Minutes



Isolate peripheral blood mononuclear cells (PBMCs) from whole blood quickly and easily with SepMate™. By incorporating SepMate™ specialized tubes into your density gradient centrifugation step, you can **obtain isolated PBMCs in just 15 minutes**. SepMate™ tubes contain an insert that creates a barrier between the density gradient medium and blood, thus eliminating the need for careful blood layering and allowing mononuclear cells to be easily harvested with a simple pour.

SepMate™ is registered in select countries as an In Vitro Diagnostic (IVD) device for the isolation of mononuclear cells (MNCs) from whole blood or bone marrow by density gradient centrifugation.* SepMate™ tubes are manufactured following current Good Manufacturing Practices (cGMP) and are sterile to ensure no contamination of samples.

Why Use SepMate™?

EASY. Avoid slow and laborious sample layering over the density gradient medium.

FAST. Centrifuge for just 10 minutes with the brake on and simply pour off PBMCs into a new tube.

CONSISTENT. Eliminate errors and minimize variability between users.

REGISTERED. Use with whole blood or bone marrow samples for In Vitro Diagnostic (IVD) applications.*

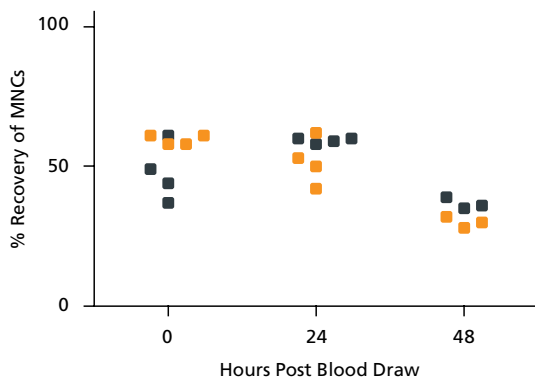


Figure 1. SepMate™ Does Not Reduce Recovery of Mononuclear Cells

Recovery of mononuclear cells from a single sample at 0, 24, and 48 hours post blood draw enriched by density gradient centrifugation with SepMate™-15 (orange squares) or without SepMate™-15 (dark grey squares).



"I tested the SepMate™ tubes yesterday and they worked... fantastically! I ran in parallel the same sample with my standard protocol and the cell recovery was the same (in a quarter of the time, of course)."

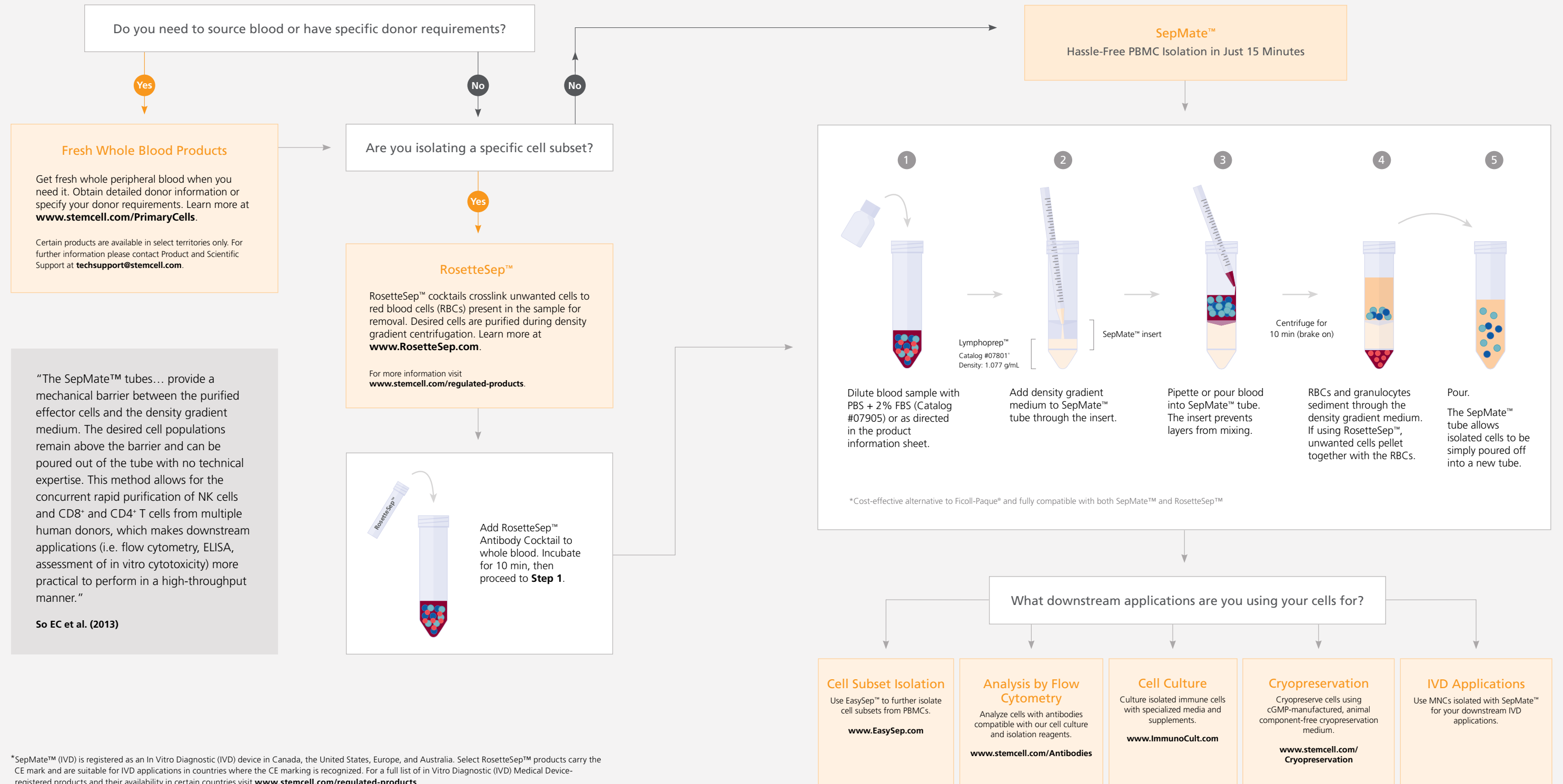
Esperanza Perucha, PhD, Academic
Rheumatology King's College London, UK

*SepMate™ (IVD) is registered as an In Vitro Diagnostic (IVD) device intended for the isolation of mononuclear cells from human whole blood by density gradient centrifugation in Canada, the United States, Europe, and Australia. This product is also available in China where it is considered a non-medical device by the China Food and Drug Administration (CFDA) and should therefore be used as general laboratory equipment. In all other regions, SepMate™ RUO is available for Research Use Only.



Request a SepMate™ Sample
www.stemcell.com/SepMateSample

Simplify and Speed Up Cell Isolation from Whole Blood



*SepMate™ (IVD) is registered as an In Vitro Diagnostic (IVD) device in Canada, the United States, Europe, and Australia. Select RosetteSep™ products carry the CE mark and are suitable for IVD applications in countries where the CE marking is recognized. For a full list of In Vitro Diagnostic (IVD) Medical Device-registered products and their availability in certain countries visit www.stemcell.com/regulated-products.

SepMate™ Applications

Isolation of Specific Cell Subsets from Whole Blood in 25 Minutes

Immune cell isolation plays an important role in areas such as drug discovery and development, vaccine research, and translational immunology. The movement towards more physiologically relevant assays based on primary human cells has created the need for a fast and efficient method of isolating immune cells from large numbers of whole blood samples. To facilitate this type of high-throughput cell processing, SepMate™ can be combined with RosetteSep™ for rapid and efficient cell isolation directly from whole blood in as little as 25 minutes (see page 2). No columns or magnets are necessary, and minimal training is required.

At the University of Maryland School of Medicine, Dr. Ajay Jain and colleagues have routinely isolated Natural Killer (NK) cells from large numbers of human samples. Jain's lab adopted the RosetteSep™ and SepMate™ cell isolation system in place of their previous method: density gradient centrifugation followed by column-based immunomagnetic isolation. Dr. Jain's group found that NK cells isolated using RosetteSep™ and SepMate™ have similar expression profiles and cytotoxicity to cells isolated using their previous method but cells were obtain in less than half of the time.¹

Please contact our Product and Scientific Support team at techsupport@stemcell.com for more information on using SepMate™ for PBMC isolation from non-human blood samples.

Product Listing

TUBE	CATALOG #	BLOOD VOLUME PROCESSED (mL)	UNIT SIZE
SepMate™-15 (IVD) ^a	85415	0.5 - 5	100 tubes
SepMate™-50 (IVD) ^a	85450	4 - 17	
SepMate™-15 (IVD) ^a	85420	0.5 - 5	500 tubes
SepMate™-50 (IVD) ^a	85460	4 - 17	
SepMate™-15 (RUO) ^b	86415	0.5 - 5	100 tubes
SepMate™-50 (RUO) ^b	86450	4 - 17	
SepMate™-15 (RUO) ^b	86420	0.5 - 5	500 tubes
SepMate™-50 (RUO) ^b	86460	4 - 17	
DENSITY MEDIUM	CATALOG #	DENSITY	UNIT SIZE
Lymphoprep™	07851	1.077 g/mL ^c	500 mL

- SepMate™ (IVD) is available in Australia, Canada, Europe, and the United States of America, where it is registered as an In Vitro Diagnostic (IVD) device for the isolation of mononuclear cells from human whole blood and bone marrow by density gradient centrifugation. This product is also available in China where it is considered a non-medical device by the China Food and Drug Administration (CFDA), and should therefore be used as general laboratory equipment.
- SepMate™ (RUO) is intended for Research Use Only (RUO) and is available in regions where SepMate™ (IVD) is not available.
- Lymphoprep™ has the same density as Ficoll-Paque® and can be substituted for Ficoll-Paque® without any need to change your existing protocols. Lymphoprep™ is for Research Use Only (RUO).

References

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