

# Isolating Human Peripheral Blood Mononuclear Cells from Buffy Coats *via* High Throughput Immunomagnetic Bead Separation

 Maria Villalva<sup>1</sup>, Sara Macphail<sup>1</sup>, Yingshi Li<sup>1</sup>, Beth Caruana<sup>1</sup>
<sup>1</sup>New South Wales Health Statewide Biobank, New South Wales Health Pathology

## Corresponding Author

Beth Caruana

Beth.Caruana@health.nsw.gov.au

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jove.com/video/66887

## Materials

Name	Company	Catalog Number	Comments
Cell cryopreservation media CS10, 100 mL (CRYOSTOR)	StemCell™ Technologies	07930	
Class II Biological Safety Cabinet	Thermo Scientific™	51033311	
CoolCell 1 mL FX	BioTools	BCS-407P	This is the control rate freezing container used.
Distilled Water	Bacto Laboratories	561832	
DxH 500 Hematology Analyzer	Beckman Coulter Life Sciences	B40601	Referred to as external automated cell counter.
EasyEights™ EasySep™ Magnet	StemCell™ Technologies	18103	
EasySep™ Direct Human PBMC Isolation Kit	StemCell™ Technologies	19654	Kit includes the magnetic bead tube and the cocktail mix tube
Ethylenediaminetetraacetic acid	Sigma-Aldrich Pty Ltd	E6758-500G	Instructions to make 0.1M EDTA solution from EDTA salt is located in supplemental file 2.
Lymphoprep™ Density Gradient Medium	StemCell™ Technologies	7851	
Megafuge ST4 Plus Centrifuge	Thermo Scientific™	THR75009903	
Orion Star A211 pH meter electrode	Thermo Scientific™	STARA2110	
Orion™ ROSS Ultra™ Glass Triode™ pH/ATC Combination Electrodes	Thermo Scientific™	8302BNURCA	
Phosphate buffered saline (PBS), solution, 1X, 500ml	Life Technologies Australia Pty Ltd	10010023	
Prism	GraphPad		
RoboSep™ Buffer 1X	StemCell™ Technologies	20104	Software used for statistical analysis.
RoboSep™-S	StemCell™ Technologies	21000	Fully automated cell separator instrument.
RoboSep™ Filter Tips	StemCell™ Technologies	20125	

SepMate™-50 (IVD) tubes	StemCell™ Technologies	85460	IVD - In vitro diagnostics. Also known as SepMate™-50 tubes
Vi-CELL XR Cell Analyzer	Beckman Coulter Life Sciences		Internal automated cell counter. Instrument obsolete and no longer available for purchase (as of December 31, 2022). Alternative instrument is the ViCell BLU Cell Viability Analyzer (Product no. C19196).
Vi-CELL XR Quad Pack Reagent Kit	Beckman Coulter Life Sciences	383722	