



Tech Tips

Xenographic Retention Chromatography (XRC)

Preparing & Preserving Mononucleated Cells

Overview

This is a convenient procedure for preparing and preserving mononucleated cells after they have been isolated using the Ficoll process. This procedure is compatible with our EpiSep™ Cytokeratin reagents kits.

Reagents Required

Refer to the sample worksheet on Page 2 for total reagent volume requirements.

- 4% Formaldehyde Solution in 0.01M PBS, pH 7.4.
- 0.01M PBS, pH 7.4.
- Blocking Buffer (Cat.# R2116-1).
- Cell Storage Solution (Cat.# R2129-1).

Suggested Sample Preparation Procedure

- 1) Centrifuge cell suspension for 5 minutes at 500xg.
- 2) Remove supernatant using a transfer pipette.
- 3) Add 1mL of 4% Formaldehyde solution in 0.01M PBS, pH 7.4.
- 4) Resuspend cells with brief vortexing.
- 5) Mix the solution by rotating the vial for 5 minutes on the Microvial Rotator.
- 6) Centrifuge the resuspended sample for 5 minutes at 500xg.
- 7) Remove supernatant as completely as possible using a transfer pipette without disturbing the pellet.
- 8) Add 1mL of 0.01M PBS, pH 7.4 to the pellet.
- 9) Resuspend cell with brief vortexing.
- 10) Mix the solution by rotating the vial for 3 – 5 minutes on the Microvial Rotator.
- 11) Centrifuge cell suspension for 5 minutes at 500xg.
- 12) Remove supernatant using a transfer pipette.
- 13) Resuspend pellet with 1mL of Blocking Buffer.
- 14) Incubate the sample for 3 – 5 minutes while rotating on the Microvial Rotator.

Assay the samples within 24 – 48 hours. Otherwise, proceed with the next steps.

- 15) Centrifuge cell suspension for 5 minutes at 500xg.
- 16) Remove supernatant using a transfer pipette.
- 17) Add 1mL of Cell Storage Solution to the pellet.
- 18) Resuspend pellet by flash vortexing.
- 19) Store frozen between –10 and –20°C.

Technical Assistance

For technical assistance, contact the WaveSense, Inc. Technical Service Department at (800) 807-7760 or (949) 341-1980 or Fax to (949) 341-1982.

Customer Service

To place an order, contact the WaveSense, Inc. Customer Service Department at (800) 807-7760 or (949) 341-1980 or Fax to (949) 341-1982.

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Worksheets

Important

The calculation sheet below is provided as an example for your convenience. Reagents may be listed more than once to be used either in a dilution step or as a working solution separately.

Reagent Preparation & Requirements Worksheet

Reagents Required	Volume Required per Sample	# of Samples	Total Required Volume of Reagents	Lot #	Expiration Date
4% Formaldehyde Solution in 0.01M PBS, pH 7.4*	1mL	_____	_____ mL		
0.01M PBS, pH 7.4	1mL	_____	_____ mL		
Blocking Buffer	1mL	_____	_____ mL		
Cell Storage Solution	1mL	_____	_____ mL		

Suggested Sample Preparation Procedure

Step	Start Time	End Time	Complete ✓
1) Centrifuge cell suspension for 5 minutes at 500xg.			
2) Remove supernatant using a transfer pipette.			
3) Add 1mL of 4% Formaldehyde solution in 0.01M PBS, pH 7.4.			
4) Resuspend cells with brief vortexing.			
5) Mix the solution by rotating the vial for 5 minutes on the Microvial Rotator.			
6) Centrifuge the resuspended sample for 5 minutes at 500xg.			
7) Remove supernatant as completely as possible using a transfer pipette without disturbing the pellet.			
8) Add 1mL of 0.01M PBS, pH 7.4 to the pellet.			
9) Resuspend cell with brief vortexing.			
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11) Centrifuge cell suspension for 5 minutes at 500xg.			
12) Remove supernatant using a transfer pipette.			
13) Resuspend pellet with 1mL of Blocking Buffer.			
14) Incubate the sample for 3 – 5 minutes while rotating on the Microvial Rotator.			
Assay the samples within 24 – 48 hours. Otherwise, proceed with the next steps.			
15) Centrifuge cell suspension for 5 minutes at 500xg.			
16) Remove supernatant using a transfer pipette.			
17) Add 1mL of Cell Storage Solution to the pellet.			
18) Resuspend pellet by flash vortexing.			
19) Store frozen between –10 and –20°C.			

*Use cold 0.01M PBS, pH 7.4.