ThinPrep® Mucoid Specimens

Quick reference guide

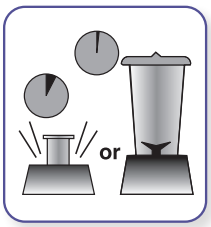
(May include respiratory and gastrointestinal specimens)

1. Collection.
Collect sample directly into 30 mL of ThinrPrep® CytoLyt® solution ***or*** add 30 mL of CytoLyt solution to the fresh specimen as soon as possible.

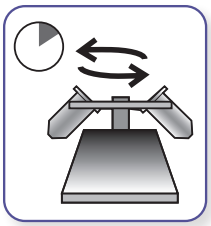
Note: *Large specimens (greater than 20 mL) should be concentrated before addition of CytoLyt solution to the sample.*

If dithiothreitol (DTT) is being used with respiratory mucoid samples, add stock before agitation. See below for preparation instructions.

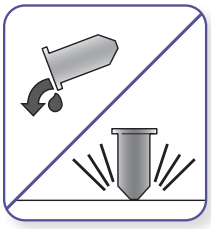
DTT has been shown to reduce the amount of mucus present in respiratory samples.[1,2] To use DTT with the ThinPrep® system, prepare a stock solution by adding 2.5 g DTT to 30 mL of CytoLyt solution. This solution is suitable for use for 1 week when stored at room temperature (15-30°C). Add 1 mL of stock solution to the sample.



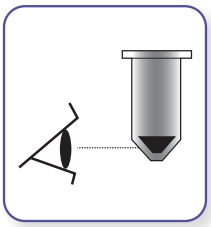
2. Mechanical agitation.
- Method A: Vortex for a minimum of 5 minutes on a "hands-free" vortexor.
- Method B: Blend for a few seconds.



3. Concentrate by centrifugation.
Centrifuge at 600*g* for 10 minutes or 1200*g* for 5 minutes.

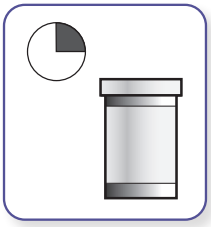


4. Pour off supernatant and resuspend cell pellet.
Refer to Procedure A on opposite side of page.

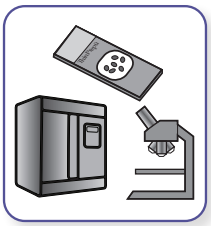


5. Evaluate cell pellet appearance.
Refer to Procedure B on opposite side of page.

6. Add an appropriate amount of specimen (dependent on the size of the cell pellet) to the ThinPrep® PreservCyt® solution vial.
Refer to Procedure C on opposite side of page.



7. Allow to stand in PreservCyt solution for 15 minutes.



8. Run on either the ThinPrep® 2000 processor using Sequence 3 (Mucoid), ThinPrep® Genesis™ processor, ThinPrep® 5000 processor or ThinPrep® 5000 processor with AutoLoader using Sequence Non-GYN. Fix, stain, and evaluate.

Mucoid specimens

Procedure A

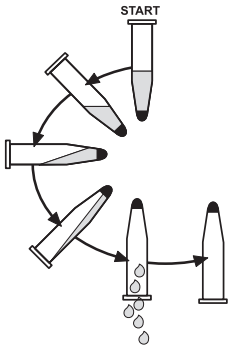
Pour off supernatant and vortex to resuspend cell pellet.

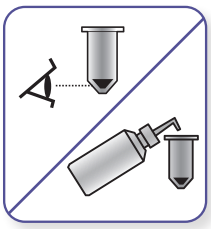
Pour off the supernatant completely to effectively concentrate the sample. To do this, invert the centrifuge tube 180 degrees in one smooth movement, pour off all the supernatant, and then return the tube to its original position as shown in Figure 1. Observe the cell pellet during inversion to avoid accidental loss of cellular material.

Caution: *Failure to completely pour off the supernatant may produce a sparse sample and an unsatisfactory slide due to dilution of the cell pellet.*

Resuspension can be done on a vortexor or may be achieved by syringing the pellet back and forth with a plastic pipette.

Figure 1.
Pouring off supernatant





Procedure B

Evaluate cell pellet appearance.

Appearance of cell pellet	Procedure
Cell pellet is white, pale pink, tan or not visible.	Add specimen to PreservCyt solution vial. See Procedure C.
Cell pellet is distinctly red or brown indicating the presence of blood.	CytoLyt solution wash. - Add 30 mL of CytoLyt solution. - Concentrate by centrifugation. - Pour off supernatant and vortex to resuspend cell pellet.
Cell pellet is mucoid (not in liquid form). To test for liquid form, draw a small amount of the sample into a pipette and deliver drops back into the tube. If the drops appear stringy or gelatinous, then the mucus must be further liquefied.	CytoLyt solution wash. - Add 30 mL of CytoLyt solution. - Mechanical agitation. - Concentrate by centrifugation. - Pour off supernatant and vortex to resuspend cell pellet.

Procedure C

Add specimen to PreservCyt solution vial.

Determine the cell pellet size and refer to the table below:

Size of cell pellet		Procedure
	Pellet is clearly visible and the pellet volume is less than 1 mL.	Place the centrifuge tube in a vortexor to resuspend the cells in the residual liquid or mix the pellet by syringing it manually with a pipette. Transfer 2 drops of the pellet to a fresh PreservCyt solution vial.
	Pellet is not visible or is scant.	Add the contents of a fresh PreservCyt solution vial (20 mL) into the tube. Vortex briefly to mix the solution and pour the entire sample back into the PreservCyt solution vial.
	Pellet volume is greater than 1 mL.	Add 1 mL of CytoLyt solution into the tube. Vortex briefly to resuspend the pellet. Transfer 1 drop of the specimen to a fresh PreservCyt solution vial.

See your ThinProbe® Processor Operator's Manual for more information.

For technical support call 800-442-9892 - Option 1.

References: 1. Tockman, MS et al., Safe Separation of Sputum Cells from Mucoid Glycoprotein, Acta Cytologica. 39, 1128 (1995). **2.** Tang, CS et al., Dithiothreitol Homogenization of Prefixed Sputum for Lung Cancer Detection, Diagnostic Cytopathology. 10, 76 (1994.) **3.** MAN-02585-001 ThinPrep 2000 Processor Operator's Manual. Section 2: ThinPrep 2000 For Non-Gynecologic Use; Ch. 1. Section E-2 pg. 1.18-1.19 **4.** MAN-05394-001 ThinPrep Genesis Processor Operator's Manual. Ch. 5; Section E-2 pg. 5.18-5.19 **5.** MAN-06024-001 ThinPrep 5000 Processor Operator's Manual. Ch. 5; Section E pg. 5.15-5.16 **6.** MAN-06025-001 ThinPrep 5000 Processor with AutoLoader Operator's Manual. Ch. 5; Section C pg. 5.3-5.5

ThinPrep® NON-GYN