

Thermo Scientific CytoRich Red Collection Fluid Instructions for Use

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For in vitro diagnostic use. For fixation of cytology specimens.

Thermo Scientific CytoRich Red Collection Fluid is a hemolytic, alcohol-based general-purpose fixative solution. It is intended for cytology and small biopsy processing. Its active ingredients are comprised of alcohols, formaldehyde, and non-toxic demulcents, emollients, and buffers. It is used to prepare cells and small tissue fragments for cytological and histological examination.

CytoRich® Red Collection Fluid is intended for the preservation of cells and small tissue fragments in suspension. It is used to prepare cells and small tissue fragments for cytological and histological examination. CytoRich Red Collection Fluid lyses red blood cells, solubilizes many proteins, and fixes cells and small tissue fragments. It is compatible with immunohistochemical staining and results are similar to those achieved with neutral buffered formalin.

CytoRich Red Concentrate Collection Fluid is not sold as a fixative for cervicovaginal cytology. CytoRich Red Collection Fluid is used for diagnostic non-gynecological cytology specimens, which include, but are not limited to, sputa, washings, brushings, body fluids, scrapings, and fine needle aspiration biopsies. Cells and small tissue fragments that have been fixed in CytoRich Red Collection Fluid may be processed using the TriPath Care Technologies™ PrepStain™ slide processor, Thermo Scientific Shandon Cytospin System, various other preparation techniques, and cell block methods.

General Specimen Preparation

Note: Preparation time can be significantly reduced if specimens are collected in CytoRich Red Collection Fluid prior to arriving in the laboratory. This will eliminate the need to allow CytoRich Red the time to preserve and lyse during processing. ▲

Body Cavity Fluids, Washings, Brushings (Large Volume)

Received Fresh (unfixed):

1. Mix/Shake the entire sample well.
2. Pour a representative amount into a properly labeled 50-ml disposable centrifuge tube. (Two centrifuge tubes may be used for large volume/ clear fluids).
3. Centrifuge the sample(s) for 10 minutes at 600g.
4. Decant the supernatant fluid (Combine pellets if two tubes were used for a specimen) and add 25 ml of CytoRich Red Collection Fluid.
5. Cap the tube and vortex for 10-15 seconds or until the cell button/pellet appears to be broken apart and mixed thoroughly through the fluid.
6. Allow the sample to fix and lyse for at least 15 minutes. (For best results with very bloody specimens, allow the sample to fix for at least 30 minutes).
7. Process specimen according to current laboratory preparation technique.

If specimen is received pre-fixed in CytoRich Red Collection Fluid:*

1. Centrifuge the sample for 10 minutes at 600g.
2. Decant/Pour off the supernatant fluid.
3. Vortex to mix the cell button/pellet.
4. Process specimen according to current laboratory preparation technique.

Fine Needle Aspirates

Collect or mix the specimen with 10 ml of CytoRich Red Collection Fluid (add more for very bloody specimens). (See #B9990802 for Pre-filled case/180 (20 ml vials filled to 10 ml).)

If specimen is received pre-fixed in CytoRich Red Collection Fluid:*

1. Centrifuge the sample for 10 minutes at 600g.
2. Decant/Pour off the supernatant fluid.
3. Vortex to mix the cell button/pellet.
4. Process specimen according to current laboratory preparation technique.

If the specimen is received fresh (unfixed in saline, Balanced salt solution, etc.):*

1. Centrifuge the sample for 10 minutes at 600g.
2. Decant/Pour off the supernatant fluid and then add 25 ml of CytoRich Red to the specimen. (Add more CytoRich Red for very bloody specimens.)
3. Vortex to mix the cell button/pellet.
4. Allow the sample to fix and lyse for at least 15 minutes. (For best results with bloody specimens, fix the sample for at least 30 minutes).
5. Process specimen according to current laboratory preparation technique.

Sputum

Collect or mix 1 volume of specimen with 5 volumes of CytoRich Red Collection Fluid. (See Catalog # B9990803 for Pre-filled case/125 (120 ml cups filled to 60 ml).)

If specimen is received pre-fixed in CytoRich Red Collection Fluid:*

1. Vortex vigorously, or place specimen on shaker for 15-30 minutes to allow mucus to soften. (Cells can be separated from softened liquid mucus by vigorous agitation).

2. Some applications may require that the soft mucus be filtered before preparation. Using a biohazard hood, pour the softened specimen through a filtration barrier (gauze/tulle) (See Catalog # 6774012 Thermo Scientific Medium Biopsy Bags for a convenient way to filter mucus, debris, and tissue fragments) into a 50-ml centrifuge tube.
3. Centrifuge the sample for 10 minutes at 600g.
4. Decant/Pour off the supernatant fluid.
5. Vortex to mix the cell button/pellet.
6. Process specimen according to current technique.

If the specimen is received fresh:*

1. Mix 1 volume of specimen with 5 volumes of CytoRich Red Collection Fluid.
2. Vortex vigorously, or place specimen on shaker for 15-30 minutes to allow mucus to soften.
3. Centrifuge the sample for 10 minutes at 600g.
4. Decant/Pour off the supernatant fluid.
5. Vortex to mix the cell button/pellet.
6. Process specimen according to current laboratory preparation technique.

Urines (Optional)

Caution: IF YOUR LABORATORY COMMENTS ON HEMATURIA (BLOOD IN URINE), DO NOT USE CYTORICH RED COLLECTION FLUID. CytoRich Red lyses Red Blood Cells. Use Thermo Scientific Shandon Cytospin Collection Fluid or another type of nonlysing fixative. ▲

Collect or mix 1 volume of specimen to 1 equal volume of CytoRich Red Collection Fluid. (See # B9990803 for Pre-filled case/125 (120 ml cups filled to 60 ml).)

If specimen is received pre-fixed in CytoRich Red Collection Fluid:*

1. Centrifuge the sample for 10 minutes at 600g.
2. Decant/Pour off the supernatant fluid.
3. Vortex to mix the cell button/pellet.
4. Process specimen according to current laboratory preparation technique.

If the specimen is received fresh:*

1. Centrifuge the sample for 10 minutes at 600g.
2. Decant/Pour off the supernatant fluid.
3. Add 25 ml of CytoRich Red Collection Fluid.
4. Vortex to mix cell button/pellet.
5. Allow the sample to fix for at least 15 minutes. (For best results with bloody specimens, fix the sample for at least 30 minutes).
6. Process specimen according to current laboratory preparation technique.

Limitations of the Procedure

1. Cytologic samples should be fixed in CytoRich Red Collection Fluid as soon as possible after collection.
2. A sample that has become degraded prior to fixation will be unsatisfactory for examination.
3. CytoRich Red Collection Fluid should not be used to fix tissue fragments larger than 5 millimeters in average diameter.
4. CytoRich Red Collection Fluid will not perform as well on pre-fixed specimens containing Carbowax.

Storage, Stability, and Specimen Transport Requirements

CytoRich Red Collection Fluid should be stored at room temperature (15° - 25°C).

Specimens fixed in CytoRich Red Collection Fluid are stable for at least 30 days.

Morphological stability has been demonstrated in specimens stored up to six months at room temperature. Specimens fixed in CytoRich Red Collection Fluid can withstand shipment at temperatures ranging from about -5° to about +45° C.

Warnings and Precautions

FOR IN VITRO DIAGNOSTIC USE

Use appropriate Personal Protective Equipment as defined by your facility. Follow appropriate biohazard precautions when handling cell and tissue specimens. Do not ingest. CytoRich Red contains alcohols (other than ethanol), and formaldehyde.

Warning: Unfixed Cytologic specimens may contain infectious agents. Wear appropriate protection and follow biohazard precautions when handling samples. ▲

See Safety Data Sheets for warnings and precautions, as well as R & S code definitions.

See container labels for warnings and precautions.

Order Information

Product	Size	Quantity	REF
CytoRich Red Collection Fluid	4 Liters (1.06gal) bottle	Ea.	B9990800
CytoRich Red Collection Fluid	500mL bottle	2/cs.	B9990801
CytoRich Red Collection Fluid	20mL cups filled to 10mL	180/cs.	B9990802
CytoRich Red Collection Fluid	120mL cups filled to 60mL	125/cs.	B9990803

