

# Picro-Sirius Red Stain Kit (For Cardiac Muscle)

**Description:** The Picro-Sirius Red Stain Kit (For Cardiac Muscle) is intended for use in the histological visualization of thin septa and collagen fibers. This modification of the Picro-Sirius Red stain eliminates the yellow cytoplasmic staining that can obscure thin collagenous septa. Using this procedure easily allows viewing of collagenous septa as thin as 0.2-0.5 microns. The PSR stain may be viewed using standard light microscopy or polarized light resulting in birefringence of the collagen fibers to distinguish between type I and type III.

**Light Microscopy**

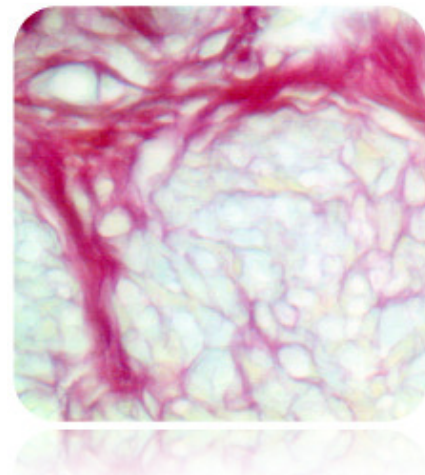
Collagen:	Red
Septa:	Red
Cytoplasm:	Colorless to Slightly Yellow

**Polarized Light Microscopy**

Type I (Thick fibers)	Yellow-Orange Birefringence
Type III (Thin fibers)	Green Birefringence

**Uses/Limitations:** Not to be taken internally.  
For In-Vitro Diagnostic use only.  
Histological applications.  
Do not use if reagents become cloudy.  
Do not use past expiration date.  
Use caution when handling reagents.  
Non-Sterile.

**Control Tissue:** Cardiac Muscle  
Uterus  
Lung  
Kidney




**Ordering information regarding individual components on back page!**

**Availability/Contents:**


<u>Item #</u>	<u>Kit Contents</u>	<u>Volume</u>	<u>Storage</u>
PQA250	Phosphomolybdic Acid Solution (0.2%)	250 ml	18-25 °C
SRS250	Picro-Sirius Red Solution	250 ml	18-25 °C
AAD250	Acetic Acid Solution (0.5%)	250 ml	18-25 °C

**Precautions:** Avoid contact with skin and eyes.  
Harmful if swallowed.  
Follow all Federal, State, and local regulations regarding disposal.  
Use in chemical fume hood whenever possible.

Storage: 18° C  25° C

 ScyTek Laboratories, Inc.  
205 South 600 West  
Logan, UT 84321  
U.S.A.



 EmergoEurope (31)(0) 70 345-8570  
Molsnstraat 15  
2513 BH Hague, The Netherlands

**Procedure:**

1. Deparaffinize sections if necessary and hydrate to distilled water.
2. Apply adequate Phosphomolybdic Acid Solution (0.2%) to completely cover tissue section and incubate for 1-5 minutes.
3. Dip slide one time in distilled water.
4. Apply adequate Picro-Sirius Red Solution to completely cover tissue section and incubate for 60-90 minutes.
5. Rinse slide quickly in two changes of Acetic Acid Solution (0.5%).
6. Rinse slide using absolute alcohol.
7. Dehydrate in 2 changes of absolute alcohol, clear, and mount in synthetic resin.


**References:**

1. Puchtler H., Waldrop F.S., Valentine L.S. Polarization microscopic studies of connective tissue stained with picro-sirius red FBA. Beitr Path. 1973; 150, pages 174-187.
2. Junqueira L.C.U., Bignolas G., Brentani R.R. Picrosirius staining plus polarization microscopy, a specific method for collagen detection in tissue sections. Histochemistry J. 1979, 11, pages 447-455.
3. Dolber, P.C., Spach, M.S. Picrosirius red staining of cardiac muscle following phosphomolybdic acid treatment. Stain Technology, January 1987, Volume 62(1): pages 23-26.
4. Whittaker, P., Kloner, R.A., Boughner, D.R., Pickering, J.G. Quantitative assessment of myocardial collagen with picrosirius red and circularly polarized light. Basic Research in Cardiology. 1994, Volume 89, Number 5, pages 397-410. DOI: 10.1007/BF00788278
5. Whittaker P. Polarized light microscopy in biomedical research. Microscopy and Analysis 1995; 44, pages 15-17.

 Bulk Reagent Ordering Information and Current Pricing at [www.scytek.com](http://www.scytek.com)


Description:	Catalog #	Volume
Phosphomolybdic Acid Solution (0.2%)	PQA250	250 ml
	PQA500	500 ml
	PQA999	1000 ml
Picro-Sirius Red Solution	SRS250	250 ml
	SRS500	500 ml
	SRS999	1000 ml
Acetic Acid Solution	AAD250	250 ml
	AAD500	500 ml
	AAD999	1000 ml

 Storage: 18° C  25° C



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