

Picro-Sirius Red Solution

Description: The Picro-Sirius Red Solution is intended for use in the histological visualization of muscle and collagen fibers in tissue sections. The PSR stain may be viewed using standard light microscopy or polarized light resulting in birefringence of collagen fibers.

Light Microscopy

Collagen: Red
Muscle Fibers: Yellow
Cytoplasm: Yellow

Polarized Light Microscopy

Collagen: Yellow-Orange and Green Birefringence

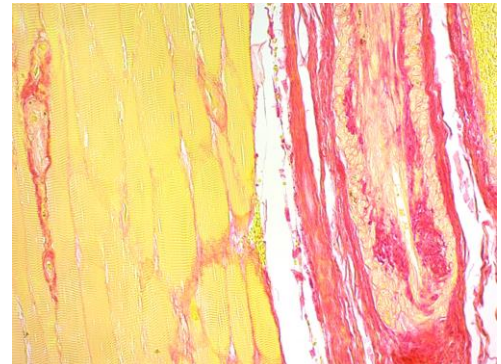


Figure 1. Collagen contrasted with skeletal muscle in human demonstrated with Picro-Sirius Red Solution

Uses/Limitations: Not to be taken internally.
For In-Vitro Diagnostic use only.
Histological applications.
Do not use if reagents become cloudy.
This protocol has not been tested on and may not be suitable with frozen sections
Do not use past expiration date.
Use caution when handling reagents.
Non-Sterile.

Control Tissue: Lung
Liver
Muscle
Kidney

Availability/Contents:
Pricing can be found online at www.scytek.com

<u>Item #</u>	<u>Volume</u>
SRS250	250 ml
SRS500	500 ml
SRS999	1000 ml

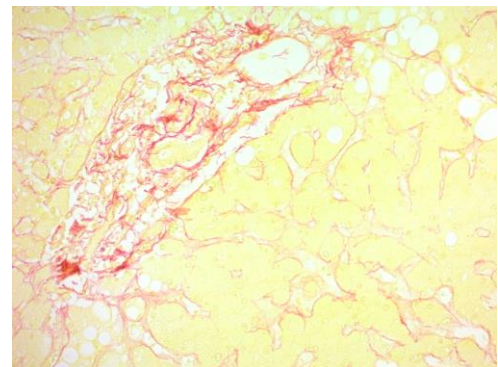




Figure 2. Collagen demonstrated in Human Liver with Picro-Sirius Red Solution

Please contact for OEM and bulk pricing.


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: Room Temperature (18-25°C)

Storage: 18° C  25° C

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




Emergo Europe
Prinsessegracht 20
2514 AP The Hague, The Netherlands

Procedure:

1. Deparaffinize sections if necessary and hydrate to distilled water.
2. Apply adequate Picro-Sirius Red Solution to completely cover tissue section and incubate for 60 minutes.
3. Rinse slide quickly in deionized water. **Optional:** If available, instead rinse with a dilute acetic acid solution (ScyTek Cat#AAD). Rinsing in this acid solution will provide quick rinsing that will slightly sharpen differentiation.
4. Rinse slide using absolute alcohol.
5. Dehydrate quickly in absolute alcohol and 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. Whittaker P. Polarized light microscopy in biomedical research. *Microscopy and Analysis* 1995; 44, pages 15-17.
4. Helmer, Rebecca A., Raul Martínez-Zaguilán, Janet S. Dertien, Candra Fulford, Oded Foreman, Vasum Peiris, and Beverly S. Chilton. "Helicase-Like Transcription Factor (Hltf) Regulates G2/M Transition, Wt1/Gata4/Hif-1a Cardiac Transcription Networks, and Collagen Biogenesis." *PLOS ONE* 8, no. 11 (November 20, 2013): e80461. <https://doi.org/10.1371/journal.pone.0080461>.
5. "Role of Heparan Sulfate 6-O Endosulfatases in Intervertebral Disc Homeostasis." *Histology and Histopathology*, 2019, 1. <https://doi.org/10.14670/HH-18-107>.

Storage: 18° C  25° C ScyTek Laboratories, Inc.
205 South 600 West
Logan, UT 84321
U.S.A.CE 

EC REP

Emergo Europe
Prinsessegracht 20
2514 AP The Hague, The Netherlands