

# Picrosirius Red Stain Kit

## Stain for Collagen Types I and III



Our **Picrosirius Red Stain** binds specifically to collagen fibrils of varying diameter to distinguish collagen Type I from Type III. Picrosirius Red Stain will quantify the amount of collagen in a given area of myocardial tissue (i.e. the collagen area fraction).

- Collagenous structures of the mandible stain brilliant red
- Unlike sections stained with hematoxylin and eosin alone, dentinal tubules, Sharpey's fibers and other structures can be seen clearly after using Picrosirius Red Stain procedure
- Under polarized light, collagen fibers can be specifically identified and their orientation determined

Cat. #	Description	Kit Size
24901	Picrosirius Red Stain Kit	250ml, 500ml

# Picrosirius Red Stain Protocol

## FIXATION

Method is most frequently used on paraffin sections of objects fixed adequately (at least 24 hours, but ideally 1 or 2 weeks) in a neutral buffered formaldehyde solution. Fixation is not critical.

## PROCEDURE

1. Deparaffinize and hydrate to distilled water
2. Stain in Weigerts Hematoxylin for 8 minutes (*if Weigerts hematoxylin is not used, go directly to step four*)
3. Rinse well in distilled water
4. Place in **Solution A** for 2 minutes
5. Distilled water rinse
6. Place in **Solution B** for 60 minutes
7. Place in **Solution C** for 2 minutes
8. 70% Ethanol for 45 seconds
9. Dehydrate, clear and mount

## RESULTS

Stains fibrillar type I and type III collagen.

Collagen = Red

Type I = Yellow

Type III = Green

## ORDERING INFORMATION

Cat. #	Description	Sizes
24901	Picrosirius Red Stain Kit	250ml, 500ml

## TO ORDER

Order online anytime at [www.polysciences.com](http://www.polysciences.com)

## References:

1. Puchtler H, Waldrop FS, Valentine LS. Polarization microscopic studies of connective tissue stained with picro-sirius red FBA. *Beitr Path* 1973; 150, 174-187
2. Junqueira LCU, Bignolas G, Brentani RR. Picrosirius staining plus polarization microscopy, a specific method for collagen detection in tissue sections. *Histochem J* 1979; 11, 447-455
3. Whittaker P. Polarized light microscopy in biomedical research. *Microscopy and Analysis* 1995; 44, 15-17
4. Whittaker P, Kloner RA, Boughner DR, Pickering JG. Quantitative assessment of myocardial collagen with picrosirius red staining and circularly polarized light. *Basic Research in Cardiology* 1994; 89, 397-410