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Chemistry beyond the ordinary

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Picrosirius Red Stain Kit

Picrosirius red method[1]. Used to stain collagen I and III. The stain will quantify the amount of collagen in a given area of myocardial tissue, i.e. the collagen area fraction. Picrosirius Red Stain binds specifically to collagen fibrils of varying diameter that is used to distinguish collagen type I from collagen type III. Collagenous structures of the mandible stained brilliant red. Dentinal tubules, Sharpey's fibers and other structures not easily seen in sections stained with hematoxylin and eosin alone were seen clearly after this procedure. Under polarized light collagen fibers could be specifically identified and their orientation determined. Picrosirius red-hematoxylin is recommended for examination of normal or pathologic dental specimens.

Contents of Kit:

- Solution A
- Solution B
- Solution C

Fixation:

Fixation is not critical. The 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 fomaldehyde solution.

Procedure:

1. Deparaffinize and hydrate to distilled water.
2. Stain in Weigerts Hematoxylin for 8 minutes (optional) if Weigert's 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 110 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	Size
24901-250	Picrosirius Red Stain Kit	250ml
24901-500	Picrosirius Red Stain Kit	500ml

To Order:

In The U.S. Call: 1-800-523-2575 • 215-343-6484
In The U.S. FAX: 1-800-343-3291 • 215-343-0214

In Germany Call: (49) 6221-765767
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References:

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