



# Instructions For Use KT 037-IFU

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## Picro-Sirius Red Stain Kit (For Collagen)

### Description and Principle

The Picro-Sirius Red Stain Kit (For Collagen) 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.

Collagen and reticular fibers are selectively stained by Sirius Red in a strongly acidic solution saturated with picric acid. Sirius Red binds to collagen in a highly ordered parallel manner enhancing the natural birefringent properties of collagen.

### Expected Results

#### Light Microscopy

Collagen: Red  
Muscle Fibers: Yellow  
Cytoplasm: Yellow

#### Polarized Light Microscopy

Collagen: Yellow-Orange and Green Birefringence

### Kit Contents

	Volume	Storage
1. Picro-Sirius Red Solution	250 ml	15-30°C
2. Acetic Acid Solution (0.5%)	250 ml x 2	15-30°C

### Suggested Controls (not provided)

Lung, Uterus, Muscle, Kidney.

### Uses/Limitations

For In-Vitro Diagnostic use only.

Do not use if reagents become cloudy or precipitate

Do not use past expiration date.

Use caution when handling reagents.

Non-Sterile

Intended for FFPE sections cut at 5-10µm.

This procedure has not been optimized for frozen sections.

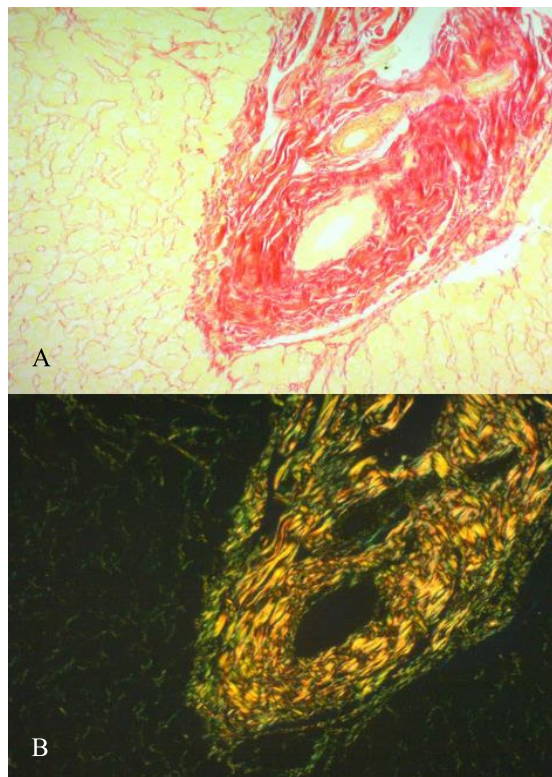
Frozen sections may require protocol modification.

### Storage

Store kit and all components at room temperature (15-30°C).

### Safety and Precautions

Please see current Safety Data Sheets (SDS) for this product and components GHS classification, pictograms, and full hazard/precautionary statements. If there is any serious incident that has occurred in relation to the device, please contact the manufacturer: Diagnostic BioSystems Technical Support at (925) 484-3350, extension 2 or [techsupport@dbiosys.com](mailto:techsupport@dbiosys.com). If required, please report to the Competent Authority of the Member State in which the user and/or patient is established.



### 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 two changes of Acetic Acid Solution (0.5%).
4. Rinse slide using absolute alcohol.
5. 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. Whittaker P. Polarized light microscopy in biomedical research. Microscopy and Analysis 1995; 44, pages 15-17.