

# DATASHEET

## Picro Sirius Red Solution

### Product overview

<b>Name</b>	Picro Sirius Red Solution
<b>Cat No</b>	HB9475
<b>Alternative names</b>	PSR Stain Solution, Picrosirius Red Solution
<b>Biological description</b>	<b>Overview</b>

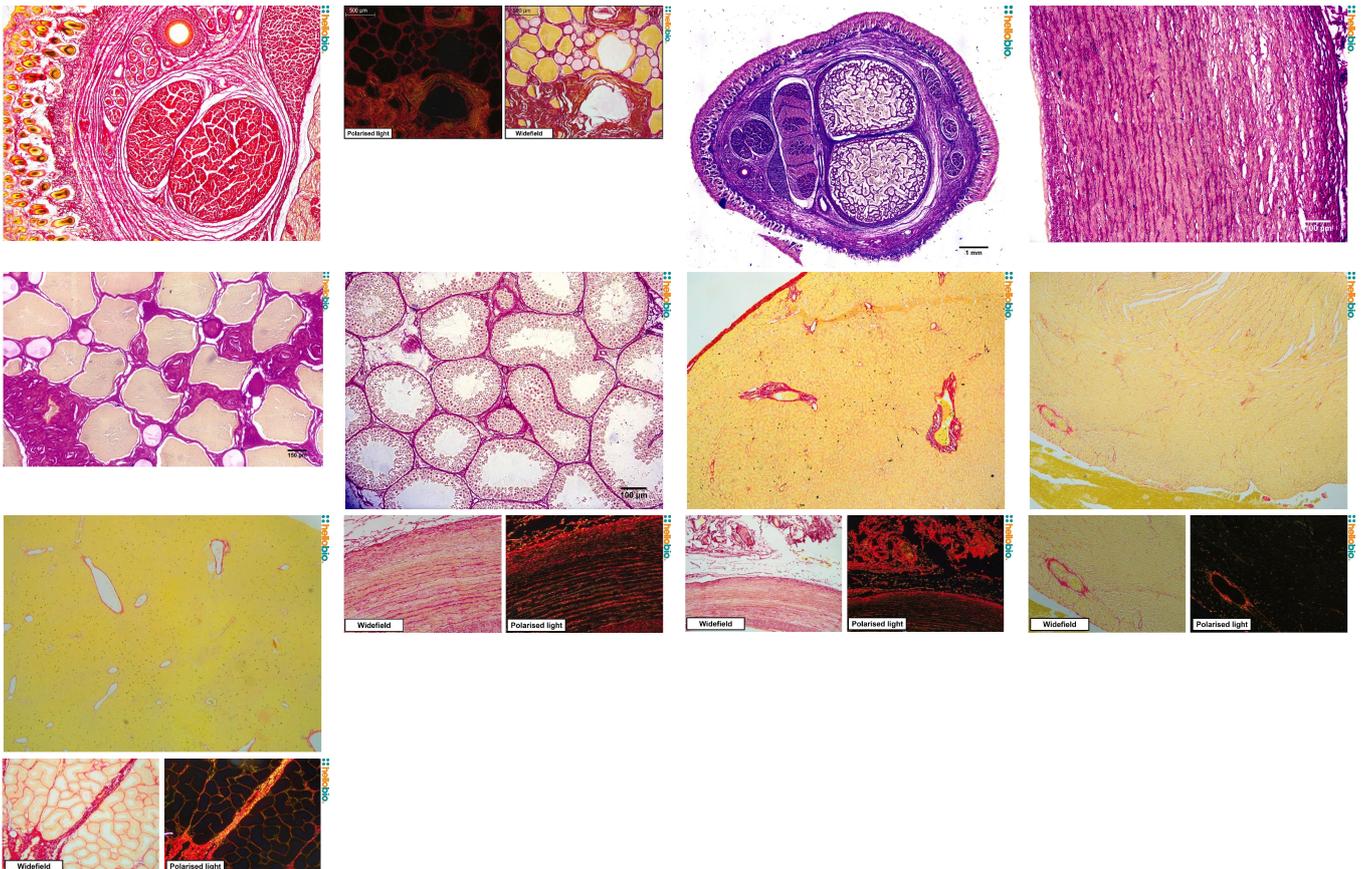
The picro sirius red staining technique is frequently used to histologically stain collagen I and III fibers. It can be used to identify fibrillar collagen networks in tissue sections.

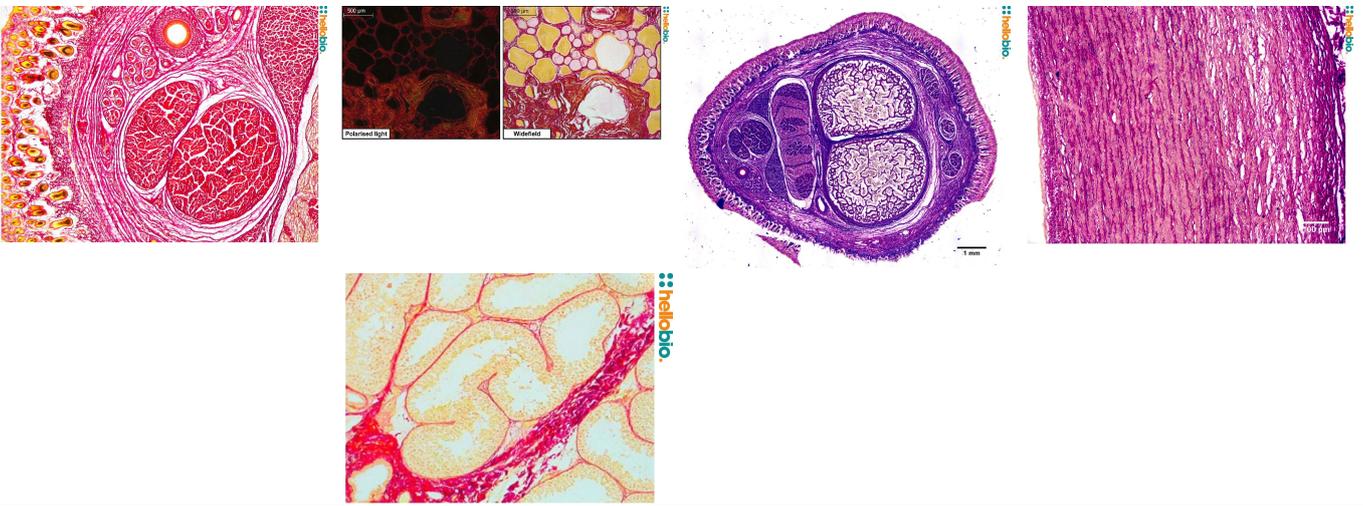
When viewed under linear polarized light, collagens appear as green, red, orange or yellow fibers.

Sample orientation under linear polarized light is thought to affect the hue and signal strength of the technique. Circular polarized light may be used to overcome this limitation but requires specialized equipment. Alternatively, fluorescent imaging of picro sirius red stained samples may be used which yields a strong red fluorescent signal that is sensitive and specific for collagen and is unaffected by sample orientation.

<b>Biological action</b>	Dyes & stains
<b>Description</b>	Solution for histological staining of Collagen I and III fibers

### Images





## Biological Data

### Application notes

### Protocol summary:

- Deparaffinize/ dewax sections if required
- Hydrate in distilled water
- Immerse sections in picro Sirius red solution and stain for 60 min at room temperature
- Rinse slides quickly in 2 changes of acetic acid solution
- Rinse slide in absolute alcohol
- Deyhydrate in 2 changes of absolute alcohol
- Clear and mount slide using resinous mounting medium. A permanent and not aqueous mounting medium should be used.

### Interpretation of staining / results:

#### Polarized Light Microscopy:

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

#### Light Microscopy:

- Collagen – Red
- Muscle Fibers – Yellow
- Cytoplasm - Yellow

**Control tissue:** Lung, Muscle, Kidney or Uterus may be used as a control tissue.

## Solubility & Handling

### Storage instructions Important

Room temperature  
This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use

## References

### Method for Picrosirius Red-Polarization Detection of Collagen Fibers in Tissue Sections

Rittie (2017) Methods Mol Biol 1627

PubMedID

28836216

## **Picrosirius Red Staining: A Useful Tool to Appraise Collagen Networks in Normal and Pathological Tissues**

Lattouf et al (2014) J Histochem Cytochem 62(10)

**PubMedID**

[25023614](#)

## **Picrosirius Staining Plus Polarization Microscopy, a Specific Method for Collagen Detection in Tissue Sections**

Junquera et al (1979) Histochem J 11(4)

**PubMedID**

[91593](#)

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