

Protocol Booklet

Product Code(s) HB6179

Product Name Picro Sirius Red Stain Kit

Purpose Histological staining of collagen I and III fibers.

Please note: This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use

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Product Overview

The picro sirius red staining technique is frequently used to histologically stain collagen I and III fibers. This kit 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.

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.

Components & storage

Store the kit at room temperature immediately on receipt. The kit can be stored for 1 year if the components have not been reconstituted. Keep away from open flame and refer to the safety datasheet.

- Picrosirius Red Solution: 1 x 250 mL
- Acetic Acid Solution (0.5%): 2 x 250 mL

The following components are required to perform this assay but are not included in the kit:

- Absolute alcohol
- Distilled water



Protocol

- 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.

Guidelines, precautions, troubleshooting

Observe safe laboratory practice and consult the safety datasheet. Please see the datasheet on our website for general guidelines, precautions, limitations on the use of the assay kit.

Contact

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hours: weekdays