

Sirius Red Staining Kit (Cardiac Tissue)

Cat #: A-CSH277

Size: 3×250mL

Storage: 10-30 °C, Avoid exposure to light (1 year)

Product Description

Solution A: Sirius Red Staining Solution	250ml	10-30 °C, Avoid exposure to light
Solution B: Acetic Acid Solution (0.5%)	2×250ml	10-30 °C,

Picro Sirius Red Stain is a simple and sensitive method used to identify the collagen fiber network in tissue sections. It is employed for qualitative or quantitative assessment of abnormal changes in the collagen network associated with degenerative diseases, genetic disorders, or acquired conditions, using morphological imaging analysis. Sirius Red is a strong and linear anionic dye that contains six sulfonic acid groups, enabling it to firmly bind to cationic collagen fibers. Under polarized light detection, collagen fibers exhibit positive uniaxial birefringence, which is enhanced when combined with Sirius Red dye, allowing differentiation between the two types of collagen fibers.

This Picro Sirius Red Stain kit (for myocardial tissue) primarily consists of a phosphomolybdic acid solution (0.2%), Sirius Red staining solution, and acetic acid solution (0.5%). It enables easy visualization of collagen fibers with a thickness as thin as 0.2-0.5 μm . The staining can be observed using a standard light microscope or polarized light, resulting in birefringence of collagen fibers. The staining solution is stable, resistant to fading, and the procedure is simple to perform.

Usage

- 1.If necessary, dewax the sections and gradually rehydrate them to water.
- 2.Completely cover the tissue sections with an adequate amount of phosphomolybdic acid solution (0.2%) and incubate for 1-5 minutes.
- 3.Immerse the slides in distilled water once.

4. Stain the sections with Sirius Red staining solution for 60-90 minutes.
5. Quickly rinse the slides with acetic acid solution (0.5%).
6. Rinse the slides with absolute ethanol.
7. Dehydrate the slides twice with absolute ethanol and seal with resin.

Staining Results

Light Microscopy	Collagen Protein, Basement Membrane	Red
	Muscle Fibers, Cytoplasm	Colorless to pale yellow
Polarized Light Microscopy	Collagen Protein	Yellow-orange and green birefringence
	Control Tissues	Myocardium, Lung, Kidney

Notes

For your safety and health, please wear a lab coat and disposable gloves while performing the experiment.

Disclaimer

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.