



VitroView™ Picro-Sirius Red Stain Kit

SKU No. VB-3017

Introduction

Specific staining by Picro-sirius red is one of the most important stains to study collagen networks in different tissues. VitroView™ Picro-Sirius Red Stain Kit is designed for stain of collagen I and III fibers. The Sirius Red stain may be viewed using standard light microscopy or polarized light resulting in birefringence of the collagen fibers to distinguish between type I and type III.

Kit Components

VB-3017-1 Weigert's Hematoxylin Solution A -----	125 ml
VB-3017-2 Weigert's Hematoxylin Solution B -----	125 ml
VB-3017-3 Picro-sirius Red Solution -----	250 ml
VB-3017-4 Acidified Water -----	250 ml

Storage

Room temperature.

Protocol

1a. For formalin-fixed, paraffin-embedded (FFPE) tissue sections: Sides need to be deparaffinized and rehydrated.

- a) Xylene I for 6 minutes and II for 6 minutes.
- b) Ethanol 100% (2 minutes) ×2
- c) Ethanol 95% (2 minutes) ×2
- d) Ethanol 70% (2 minutes) ×1

1b. For Frozen Sections: fix frozen sections in 10% formalin for 30 minutes.

- 2. Rinses in distilled water 2min×3.
- 3. Prepare Weigert's working hematoxylin: mix Weigert's Hematoxylin Solution A and B at 1:1 ratio.
- 4. Stain nuclei with Weigert's haematoxylin for 8 minutes, and then wash the slides for 10 minutes in running tap water.
- 5. Stain in Picro-sirius Red Solution for 1 hour.

Note: This gives near-equilibrium staining, which does not increase with longer times. Shorter times should not be used, even if the colors look good.

- 6. Wash in two changes of acidified water (1-2 seconds per change).
- 7. Two changes of 100% Ethanol (2 minute per change).
- 8. Clear with 3 changes of xylene (5 minutes per change) and coverslip with Permount or other suitable organic mounting medium.

Expected results

Light Microscopy

- Collagen ----- red
- Muscle Fibers ----- yellow
- Cytoplasm ----- yellow

Polarized Light Microscopy

- Type I (Thick fibers) ----- yellow-orange
- birefringence Type III (Thin fibers) ----- green birefringence

Note: This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Precautions: Handle with care. Avoid contact with eyes, skin and clothing. Do not ingest. Wear gloves.