



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.
7. Wash slides, 2min × 2 in dH₂O.
8. Dehydrate with 2 changes of 95% Ethanol and 2 changes of 100% Ethanol (2 minute per change).
9. Clear with 3 changes of xylene (5 minute 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.