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Working

UC Davis - Massons Trichrome [↗](#)

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[dx.doi.org/10.17504/protocols.io.y87fzzn](https://doi.org/10.17504/protocols.io.y87fzzn)

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ABSTRACT

Summary:

Massons trichrome staining is used for detection of collagen fibers in tissues such as skin, heart, etc. on formalin-fixed, paraffin-embedded sections, and may be used for frozen sections as well. The collagen fibers will be stained blue and the nuclei will be stained black and the background is stained red.

Modified from: Massons Trichrome UC Davis Clinical Pathology lab

EXTERNAL LINK

<https://mmpc.org/shared/document.aspx?id=259&docType=Protocol>

MATERIALS

NAME

CATALOG #

VENDOR

[Weigerts Hematoxylin](#)

[Bouins solution](#)

[Biebrich Scarlet-Acid Fuchsin solution](#)

[Phosphomolybdic- Phosphotungstic Acid solution](#)

[Aniline Blue solution](#)

[Acetic acid 1%](#)

[coverslip](#)

2935-245

Corning

MATERIALS TEXT

Reagent Preparation:

Reagent1: Biebrich Scarlet-Acid Fuchsin solution

Reagents and Materials:

Biebrich scarlet, aqueous, 1%	90 mL
Acid fuchsin, aqueous, 1%	10 mL
Glacial acetic acid	1.0 mL

Reagent 2: Phosphomolybdic- Phosphotungstic Acid solution

Reagents and Materials:

Phosphomolybdic acid	1.25 gm
Phosphotungstic acid	1.25 gm
Distilled water	50 mL

Procedure: Mix just before use

Reagent 3: Aniline Blue solution

Reagents and Materials:

Aniline blue	2.5 gm
Glacial Acetic acid	2.0 mL
Distilled water	100 mL

Procedure: Mix just before use

SAFETY WARNINGS

WARNING:

Formalin is, toxic, flammable and considered a carcinogen

All blood components and biological materials should be handled as potentially hazardous. Follow universal precautions established by CDC when handling and disposing of infectious agents.

BEFORE STARTING

WARNING:

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- 1 Hydrate to water.
- 2 Place in Bouins for one hour in 55 degree oven or overnight at room temperature if needed.
- 3 Wash well in running water until yellow is gone.
- 4 Stain in Weigerts Hematoxylin for 10-20 minutes.
- 5 Wash well in running water for 10 minutes. Rinse distilled water.
- 6 Place slides in Biebrich Scarlet-Acid Fuchsin for 5 minutes.
- 7 Rinse in distilled water.
- 8 Place slides in the Phosphomolybdic-Phosphotungstic Acid Solution in a plastic coplin jar and put in the Bio Rad for 25 seconds using the total time setting. Let stand 30 seconds.

Place slides in Aniline Blue solution for 10 minutes.

9

10 Rinse in distilled water.

11 Place in 1% Acetic acid for 3 minutes if desired.

12 Dehydrate and coverslip.



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