

Victoria Blue Collagen Fiber Staining Kit

Catalog No.: RA20139

Basic Information

Product name	Victoria Blue Collagen Fiber Staining Kit
Sizes	100 mL
Storage	RT, keep away from light
Shipping	RT
Validity	12 months

Product Introduction

Collagen fibers are the most widely distributed and abundant fibers in connective tissue, found extensively in various organs, especially in the skin, sclera, and tendons. Type I collagen fibers are mainly found in bone, skin, and tendons; Type II collagen fibers are primarily found in cartilage; Type III collagen fibers are mainly present in embryonic tissues and adult blood vessels and gastrointestinal tract; Type IV collagen fibers are mainly found in the basement membrane. Methods for demonstrating collagen fibers include Van Gieson staining, Masson trichrome staining, Victoria blue collagen fiber staining, and Sirius red staining. Under polarized light microscopy, collagen fibers exhibit positive uniaxial birefringence. When combined with Sirius red staining, this birefringence is enhanced, improving resolution and allowing differentiation between collagen types.

EnkiLife Victoria Blue Collagen Fiber Staining Solution is mainly composed of Victoria blue staining solution and Ponceau staining solution. This staining solution overcomes the disadvantages of VG staining, such as fading and poor contrast. It is primarily used in studies of abnormal collagen fibers or fibrosis in various tissue lesions. Under a conventional light microscope, collagen fibers in tissues such as heart and blood vessels are stained red.

Product Components

Components	2x 100mL
Reagent (A): Victoria Blue Staining Solution	100 mL
Reagent (B): Ponceau Staining Solution	100 mL

Victoria Blue Collagen Fiber Staining Kit

Catalog No.: RA20139

Materials Required (Not Supplied)

1. 10% formalin fixative, graded ethanol, xylene or eco-friendly dewaxing and clearing solution, neutral balsam.
2. Conventional light microscope.

Experimental procedure

1. Fix tissue in 10% formalin fixative, dehydrate routinely, and embed in paraffin.
2. Cut sections to 6 μm thickness. Dewax with xylene or dewaxing solution and hydrate to water. Rinse briefly with 70% ethanol.
3. Immerse in Victoria blue staining solution for 15 min.
4. Differentiate with 95% ethanol for a few seconds, then rinse with running water 2–3 times.
5. Counterstain with Ponceau staining solution dropwise for 5 min, then differentiate and dehydrate directly with absolute ethanol.
6. Clear with xylene or clearing solution, and mount with neutral balsam.

Staining Results

Component	Color
Collagen fibers	Red
Muscle fibers	Yellow

Notes

1. The active components in Victoria blue staining solution are volatile. Immersion staining is recommended, and the solution should be tightly sealed after use.
2. After Ponceau staining, do not rinse with water. Dehydrate directly with absolute ethanol.
3. This staining method is stable and resistant to fading.
4. Use reagents promptly after opening to avoid affecting experimental results.
5. For safety and health, wear lab coats and disposable gloves during operation.

This product is for research use only!