

Modified Sirius Red stain kit (w/o picric acid)

Collagen fiber is the most widely distributed and abundant fiber in connective tissue. It is widely distributed in various organs. Type I collagen fibers are mainly bone, skin and tendon; Type II collagen fibers are mainly cartilage collagen; Type III collagen fibers are mainly found in embryonic tissues, adult blood vessels and gastrointestinal tract; Type IV collagen fibers are mainly in the basement membrane. Sirius red and its lining dye solution are strong acid dyes, which are easy to combine with the basic groups in collagen molecules and have strong adsorption. Polarized light microscopy shows that the collagen fibers have the property of positive uniaxial birefringence. When combining with Sirius red compound stain solution, it could enhance the birefringence and improve the resolution, so as to distinguish the two types of collagen fibers.

Modified Sirius Red stain (w/o picric acid) is mainly composed of Iron Hematoxylin stain solution and Sirius Red stain solution, without picric acid. It is mainly used in the study of collagen fiber abnormality or fiber proliferation in various tissue diseases. Under the ordinary optical microscope, the collagen fibers of heart and blood vessels and other tissues are dyed red, which is helpful for the classification and grading of various fibrotic diseases under the polarized light microscope. Immunohistochemical technique can also display type I and III collagen fibers, but the antibodies used are expensive and time-consuming, while Sirius red staining reagent is cheap and easy to operate.

Catalog No.	260033
Size	2 x 50mL
Product Category	Histochemical Stain
Storage/Stability	Ambient/1 year
Shipping	Ambient