# abcam

#### Product datasheet

# Picro Sirius Red Stain Kit (Connective Tissue Stain) ab150681

\*\*\* \* \* \* 2 Abreviews 238 References 4 Images

#### Overview

**Notes** 

Product name Picro Sirius Red Stain Kit (Connective Tissue Stain)

Sample type Tissue sections

Assay time 1h 00m

Product overview Picro-Sirius Red Stain Kit (Connective Tissue Stain) ab150681 is intended for use in the

histological visualization of collagen I and III fibers in addition to muscle in tissue sections.

The picro sirius red staining may be viewed using standard light microscopy.

Picro sirius red staining has traditionally sometimes been used with polarized light to more easily differentiate the collagen fibres from the background. Studies have used the differences between the appearance of different collagen fibres under polarized light to differentiate between different types of collagen fibres; it is unclear if the differences in appearance of the fibres is due to orientation, thickness and packing of the fibres rather than reflecting different types of collagen fibers.

Picro sirius red staining protocol summary:

- deparaffinize sections if necessary and hydrate in distilled water
- cover sections in picro-sirius red solution and incubate for 60 min
- wash slide with acetic acid solution
- wash slide with absolute alcohol
- dehydrate, clear and mount slide

#### Other products for staining tissue sections

Find more kits and reagents in the <u>special stains guide</u>, or products for antigen retrieval, blocking, signal amplification, visualization, counterstaining, and mounting in the <u>IHC kits and reagents guide</u>.

ab150681 may not be suitable for frozen sections.

Staining Interpretation

**Light Microscopy** 

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Collagen	Red
Muscle Fibers	Yellow
Cytoplasm	Yellow

# Polarized Light Microscopy\*

#### See note in overview section

Type I (Thick fibers)	Yellow-Orange Birefringence
Type III (Thin fibers)	Green Birefringence

Control Tissue: Lung, Uterus, Muscle, Kidney.

# **Properties**

# Storage instructions

Store at room temperature. Please refer to protocols.

Components	100 tests
Acetic Acid Solution	2 x 250ml
Picro Sirius Red Solution	1 x 250ml

# **Images**



ab150681 - Picro Sirius Red Stain Kit (Connective Tissue Stain)

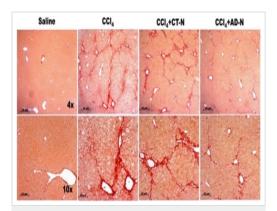
ab150681 Picro Sirius Red Stain Kit (Connective Tissue Stain) staining formalin-fixed-paraffin embedded human skeletal muscle.



ab150681 - Picro Sirius Red Stain Kit (Connective Tissue Stain)

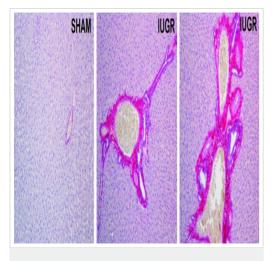
ab150681 (Picro Sirius Red stain) staining collagen (red), muscle fibres (yellow), cytoplasm (yellow) and red blood cells (yellow) in formalin fixed paraffin embedded normal human colon.

\*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre.



ab150681 - Picro Sirius Red Stain Kit (Connective Tissue Stain)

Kumar P et al. PLoS One (2014) Reproduced under the Creative Commons license http://creativecommons.org/licenses/by/4.0/ ab150681 staining mouse liver sections in control (saline group) showing normal lobular structure; in CCl<sub>4</sub> treated showing extensive collagen deposition and bridging fibrosis; and in CCl<sub>4</sub>-AND treated mice which showed decreased collagen deposition.



Evaluation of liver tissues fibrosis pattern in IUGR and SHAM adult males rats, using Picro-Sirius Red Stain (ab150681). Values are expressed as fold change (mean + SD, \* p<0.01).

Evaluation of liver tissues fibrosis pattern using Picro

Sirius Red Stain Kit (ab150681)

This image is taken from Deodati A et al. PLoS One. 2018; 13(6): e0198490. Fig 3e. doi: 10.1371/journal.pone.0198490. Reproduced under the Creative Commons license http://creativecommons.org/licenses/by/4.0/.

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