

# Instructions For Use KT 008-IFU

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## Amyloid Stain Kit (Congo Red)

#### **Description and Principle**

The Amyloid Stain Kit (Congo Red) is intended for use in the histological visualization of amyloid in tissue sections. Examination under a polarizing microscope results in green birefringence of amyloid.

Congo Red binds amyloid by hydrogen bonds with amyloid fibers in a highly oriented linear manner. Linear bound amyloid will exhibit green birefringence under polarized light.

#### **Expected Results**

Amyloid: Red to Pink
Erythrocytes: Light Orange
Eosinophil Granules: Orange to Red
Nuclei: Blue

 Kit Contents
 Volume
 Storage

 1. Congo Red Solution
 500 ml
 15-30°C

 2. Hematoxylin
 500 ml
 15-30°C

 3. Bluing Reagent
 500 ml
 15-30°C

#### Suggested Controls (not provided)

Freshly cut FFPE sections containing amyloid. It has been reported that birefringence of pre-cut sections weakens over time. Cut sections 8-10 microns for optimal visualization of amyloid deposit birefringence.

#### **Uses/Limitations**

For In-Vitro Diagnostic use only.
Do not use if reagents become cloudy or precipitate
Do not use past expiration date.
Use caution when handling reagents.
Non-Sterile
Intended for FFPE sections cut at 5-10µm.
This procedure has not been optimized for frozen sections.
Frozen sections may require protocol modification.

#### Storage

Store kit and all components at room temperature (15-30°C).

### **Safety and Precautions**

Please see current Safety Data Sheets (SDS) for this product and components GHS classification, pictograms, and full hazard/precautionary statements. If there is any serious incident that has occurred in relation to the device, please contact the manufacturer: Diagnostic

BioSystems Technical Support at (925) 484-3350, extension 2 or

BioSystems Technical Support at (925) 484-3350, extension 2 or techsupport@dbiosys.com. If required, please report to the Competent Authority of the Member State in which the user and/or patient is established.

#### **Procedure**

- 1. Deparaffinize sections and hydrate to distilled water.
- 2. Stain slide with Hematoxylin for 5 minutes.
- 3. Rinse slide in tap water.

Diagnostic BioSystems

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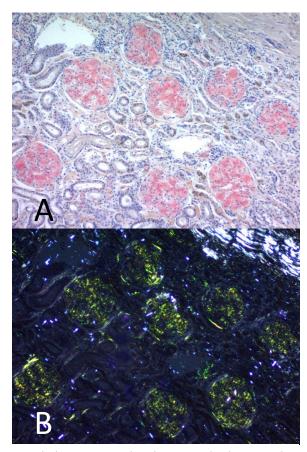
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4. Incubate slide in Bluing Reagent for 30 seconds.

- 5. Rinse slide in distilled water.
- 6. Briefly rinse slide in absolute alcohol for 3-5 seconds.



Amyloidosis in Canine Kidney demonstrated with Congo Red and viewed under A) Brightfield, and B) Polarized Light

- 7. Pour Congo Red Solution into a staining jar and place slide(s) in for 20 minutes. Ensure there is enough stain to completely cover tissue. Staining in smaller volumes of Congo Red Solution by pipetting or pouring on horizontal slides may cause non-specific staining.
- 8. Rinse excess stain off slide with absolute alcohol.
- 9. Dehydrate slide in absolute alcohol for another 30 seconds.
- 10. Clear and mount in synthetic resin.







- References

  1. Puchtler, H, et al: On the binding of Congo Red amyloid. J. Histochem. Cytochem. Vol. 10: pages 355-363, 1962.

  2. Eastwood, H. & Cole, K.R., Staining of amyloid in buffered Congo Red in 50% ethanol. Stain Technology. Vol. 46: pages 208-209, 1971.

  3. Carson, F.L., Histotechnology; A Self-Instructional Text, 2nd Edition. ASCP Press, Chicago, IL. Pages 117-121, 1996.

  4. Churukian, C., Improved Puchtler's Congo Red method. J. of Histotechnology. Vol. 23: pages 139-141, 2000.







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