

Method Procedure

Document N	Number:	SASoM/METHOD/130.v1
Title:	Histology –	Congo Red Staining
Version:	v1	
Author:	Peter Mulle	n

Effective from:	20/01/2021	
Valid to:	20/01/2023	

SOP History			
Number	Date	Reason for Change	
v1	20/01/2021	Original	

#### 1.0 Purpose –

This SOP describes the current procedure for carrying out Congo Red Staining on FFPE sections in Laboratory 248/249 at the St Andrews School of Medicine (SASoM).

#### 2.0 Scope -

This SOP applies to all staff in the SASoM carrying out Congo Red Staining on FFPE sections in Laboratory 248 at the St Andrews School of Medicine (SASoM).

## 3.0 Responsibilities -

All staff performing Congo Red Staining on FFPE sections in this manner are responsible for ensuring that the methods are followed in accordance with this SOP.

All staff must have read and signed the relevant risk assessment documents before performing this procedure.



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## 4.0 Procedure –

Description:

This high pH Congo Red stain is used for the detection of amyloid on formalin-fixed, paraffin-embedded tissue sections with amyloidosis. It may also be used for frozen sections. The amyloid deposits will be stained red and the nuclei will be stained blue. The thickness of sections is usually 5 um. In the case of inadequate amyloid deposits, 10um thick sections will be more satisfactory.

Fixation: 10% formalin.

Section: paraffin sections at 5 um (in case of inadequate amyloid deposits, use 10 um thick sections).



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- 10. Dehydrate through 95% alcohol, 100% alcohol
- 11. Clear in xylene and mount with resinous mounting medium.

Results:

Amyloid, elastic tissue, eosinophil granules; red Nuclei: blue

#### 5.0 Personal protection –

A Howie coat must be worn at all times. Gloves as specified in the appropriate COSHH RA.

#### 6.0 Spillages -

Always clean up any spills immediately after use, only you know what you have spilt and are aware of its hazard. Spillages should be mosped up with paper towel, disinfected with 70% ethanol and finally washed with detergent.

#### 7.0 Training –

All staff should undergo training in this technique before performing the procedure.

#### 8.0 Related documents -

8.1 Risk assessments – RA20229 (Histology – Congo Red Staining, Perls Prussian Blue Staining)



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# 9.0 Approval and sign off -

Author:			
Name:	Peter Mullen		
Position:	Research Fellow		
Signature:	Peter Mullen	Date:	25/01/2021
Management Appr	oval:		
Name:	Angus Jackson		
Position:	Lab Manager		
Signature:	Angus Jackson	Date:	25.01.2021
	0		
QA release by:			
Name:	Alex MacLellan		
Position:	QA Manager		
Signature:		Date:	



# STANDARD OPERATING PROCEDURE

Please sign below to indicate you have read this S.O.P and understand the procedures involved.

NAME	POSITION HELD	SIGNATURE	DATE
	X		