

Operating mode

Réf : MO-PHIVLG Sch

PHIVLG_Schiff_Arabido psis_Staining_01 Version_01

Version 01 Date : 20/10/2022 page 1/2

Schiff staining

1. Object

This method is used for detection of polysaccharides and cell walls

2. Reagent, health and safety

Periodic acid, H₅IO ₆	CAS: 10450-60-9
Schiff's reagent	
Sodium metabisulfite, Na ₂ S ₂ O ₅ Synonyms : Sodium disulfite, Sodium pyrosulfite	CAS : 7681-57-4
Hydrochloric acid, HCl	CAS : 7667-01-0

Wear lab coat and gloves Work under fume hood

3. Solutions

Reagents:

Periodic acid: 1% and distilled water

Schiff's reagent (EMS; ref: 26052-05 stored away from light)

Sulphurous water:

sodium metabisulfite at 5%: 5mlHydrochloric Acid 1N: 5mlDistilled water: 90ml

	Writer	Examiner	Approving
Name : Fonction : signature :	Karen Bertaux	Carine Alcon	



Operating mode	Réf : MO- PHIVLG_Schiff_Arabido	
Schiff staining	psis_Staining_01 Version 01 Date: 20/10/2022 page 2/2	

4. Operating Mode

Protocol have to be done under fume hood with gloves and lab coat

- Hydrolyse with periodic acid during 10min at room temperature
- Wash with tap water and after with distilled water (well drain the slides and wipe, Schiff's reagent doesn't like water)
- Stain with the Schiff reagent incubate at room temperature and dark during 20min (for roots, leaves and flowers) and between 1 and 2min for seeds
- Wash at sulfurous water (solvent of the Schiff) 2 seconds
- Wash with tap water until clean water and after with distilled water
- Drying and mounting in Isomout mounting medium

Increase the incubation in periodic acid in case of increasing the time incubation in Schiff's reagent.

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