

Fungus, PAS, *Aspergillus sp.*, Artificial Control Slides – Technical Memo

<u>CONTROL SLIDES:</u>	Part 4232A	Part 4232B
	10 Slide/Set	98 Slide/Set

PRODUCT SPECIFICATIONS:

Tissue: Positive staining rat lung and negative staining human lung.

Fixation: Formalin 10%, Phosphate Buffered (Part 1090).

Section/Glass: Paraffin sections cut at 4 microns on Superfrost™ Plus slides.

Quality Control Stain: PAS/Light Green quality control stained slide(s) included.

Reactivity: Guaranteed product specific reactivity for one year from date of receipt. Revalidate after one year to verify continued reactivity.

Storage: 15-30°C in a light deprived and humidity controlled environment.

Intended Use: To verify histological techniques and reagent reactivity.

Before using unstained control slides, review the enclosed stained slide(s) to ensure that this tissue source is acceptable for testing needs.

CONTROL SLIDE VALIDATION:

With Fungus, PAS/Light Green Stain Kit:	Part 9122A	Individual Stain Solution
Solution A: Periodic Acid 0.5%, Aqueous	250 ml	Part 13308
Solution B: Schiff Reagent, McManus	250 ml	Part 1371
Solution C: Light Green SF Yellowish Stain 0.1%, Aqueous	250 ml	Part 12203

APPLICATION:

Newcomer Supply Fungus, PAS, *Aspergillus sp.*, Artificial Control Slides are for the positive histochemical staining of *Aspergillus sp.* in tissue sections. *Aspergillus fumigatus* purchased from Remel Microbiology Products is used to produce the positive control tissue.

NEWCOMER SUPPLY VALIDATION PROCEDURE:

- Heat dry sections in oven according to your laboratory protocol.
- Deparaffinize sections thoroughly in three changes of xylene, 3 minutes each. Hydrate through two changes each of 100% and 95% ethyl alcohols, 10 dips each. Wash well with distilled water.
 - See Procedure Notes #1 and #2.
- Place in Solution A: Periodic Acid 0.5%, Aqueous for 5 minutes.
- Wash in three changes of tap water; rinse in distilled water.
- Drain slides of excess water and stain in Solution B: Schiff Reagent, McManus for 20 minutes.
- Wash gently in lukewarm tap water for 10 minutes to allow pink color to develop.
- Counterstain in Solution C: Light Green SF Yellowish Stain 0.1%, Aqueous for 5 seconds.
 - See Procedure Note #3.
- Dehydrate in two changes each of 95% and 100% ethyl alcohol. Clear in three changes of xylene, 10 dips each; coverslip with compatible mounting medium.

RESULTS:

<i>Aspergillus sp.</i>	Red to magenta
Background	Pale green
Negative lung	Negative for fungus

PROCEDURE NOTES:

- Drain slides after each step to prevent solution carry over.
- Do not allow sections to dry out at any point during procedure.
- Increase or decrease staining time in Light Green SF Yellowish Stain 0.1%, Aqueous for preference of counterstain intensity.
- If using a xylene substitute, closely follow the manufacturer's recommendations for deparaffinization and clearing steps.

REFERENCES:

- Bancroft, John D., and Marilyn Gamble. *Theory and Practice of Histological Techniques*. 6th ed. Oxford: Churchill Livingstone Elsevier, 2008. 321-323.
- Sheehan, Dezna C., and Barbara B. Hrapchak. *Theory and Practice of Histotechnology*. 2nd ed. St. Louis: Mosby, 1980. 245.
- Modifications developed by Newcomer Supply Laboratory.

