

## ***Helicobacter*, Artificial Control Slides – Technical Memo**

**CONTROL SLIDES:**      **Part 4275A**      **Part 4275B**  
10 Slide/Set      98 Slide/Set

**PRODUCT SPECIFICATIONS:**

**Tissue:** Positive staining rat lung.

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

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

**Quality Control Stain:** Thiazine 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 Differential Stain, Monochromatic Method:**  
Thiazine Stain

**Individual Stain Solution**  
Part 10522

**APPLICATION:**

Newcomer Supply *Helicobacter*, Artificial Control Slides are for the positive histochemical staining of spiral shaped *Helicobacter* bacterium, associated with stomach inflammation and implicated in the development of gastric malignancy, peptic ulcers, and chronic gastritis.

*Helicobacter pylori* purchased from American Type Culture Collection is used to produce the positive control tissue.

**NEWCOMER SUPPLY VALIDATION PROCEDURE:**

1. Heat dry sections in oven according to your laboratory protocol.
2. 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.
3. Place slides in Thiazine Stain for 1-4 minutes depending upon staining intensity preference.
4. Rinse slides quickly in distilled water; long enough to remove excess stain.
5. Allow slides to air-dry in a vertical position.
6. Dip dried slides in xylene and coverslip with compatible mounting medium.
  - a. See Procedure Note #1.

**RESULTS:**

<i>Helicobacter</i>	Dark blue
Collagen and muscle	Blue
Nuclei	Blue
Cytoplasm	Varying shades of light blue

**PROCEDURE NOTES:**

1. The elimination of dehydration steps is necessary to retain the dark stain of the organism.
2. If using a xylene substitute, follow manufacturer's recommendation for deparaffinization and coverslipping steps.

**REFERENCES:**

1. Potvin, Carol. "A Modified Diff-Quik Stain for *Helicobacter pylori* in Gastrointestinal Biopsies." *Laboratory Medicine* 25.6 (1994): 389-391.
2. Skipper, Ray, and Don DeStephano. "A Rapid Stain for *Campylobacter pylori* in Gastrointestinal Tissue Sections Using Diff-Quik." *The Journal of Histotechnology* 12.4 (1989): 303-304.
3. Modifications developed by Newcomer Supply Laboratory.

