

Helicobacter sp., Artificial Control Slides – Technical Memo

CONTROL SLIDES: Part 4275A 10 Slide/Set
Part 4275B 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: Individual Stain Solution
Thiazine Stain Part 10522

APPLICATION:

Newcomer Supply *Helicobacter sp.*, Artificial Control Slides are for the positive histochemical staining of *Helicobacter sp.*, a spiral shaped 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:

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

RESULTS:

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

PROCEDURE NOTES:

- The timings provided are suggested ranges. Optimal staining times will depend upon staining intensity preference.
- The elimination of dehydration steps is necessary to retain the dark stain of the organism.
- If using a xylene substitute, closely follow the manufacturer's recommendations for deparaffinization and coverslipping steps.

REFERENCES:

- Potvin, Carol. "A Modified Diff-Quik Stain for *Helicobacter pylori* in Gastrointestinal Biopsies." *Laboratory Medicine* 25.6 (1994): 389-391.
- 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.
- Modifications developed by Newcomer Supply Laboratory.

