

## INTENDED USE

Hp Yellow is a Schiff-type reagent and is used to demonstrate aldehydes.

## PRODUCT SUMMARY

Exposure to periodic acid prior to Hp Yellow stain oxidizes the hydroxyls in carbohydrates (mucin) to aldehydes. Hp Yellow combines directly with the aldehydes to form a stable covalent complex. Hp Yellow also bears a positive charge and stains everything in the tissue that is negatively charged. Acetic acid rinse in the procedure destains all ionically bound Hp Yellow, leaving the covalently bound mucus staining yellow. When used in combination with Hp Blue it produces results equivalent to the Alcian Yellow-toluidine blue procedure to demonstrate *Helicobacter pylori*. Negatively charged bacteria, nuclei and cytoplasm stain with the basic Hp Blue.

## INGREDIENTS

N-(and/or N,N-) sulfinated, 3,6-diamino-10-methylacridinium dihydrochloride; N-(and/or N,N-) sulfinated, 3,6-diaminoacridinium dihydrochloride; sodium metabisulfite

## WARNING

Irritating vapors. Corrosive to eyes, skin and mucous membranes. Persons with allergies and/or asthma may exhibit hypersensitivity to sulfites.

For In Vitro Diagnostic Use.

## STORAGE

Store at room temperature, away from direct sunlight. Keep container tightly closed when not in use.

## DIRECTIONS FOR USE

1. Filter before use. Do not dilute.
2. Staining with fresh solution is recommended. Air exposure and previous solution carry-over will cause Hp Yellow to decompose (forming a conspicuous black precipitate).
3. Fixative and/or section thickness may influence the intensity and hue of the mucus staining.
4. When using Hp Yellow with Hp Blue:
  - a. Mucus color may range from pure yellow, greenish yellow, to green.
  - b. If mucus is too dark yellow or green, decrease time in Hp Yellow.
  - c. If cytoplasm or nuclei have a greenish hue, increase time in acetic acid.
  - d. Use tap water instead of distilled/deionized water after acetic acid rinse. Distilled/deionized water carry-over into Hp Blue can weaken the blue color.
  - e. Dehydration in ethanol must be brief to avoid decolorizing bacteria; Hp Blue is soluble in ethanol.
  - f. Isopropanol is used to finish dehydration; it does not remove Hp Blue from the sections.
  - g. If blue color appears faded, use only one ethanol followed by two isopropanols.

## RECOMMENDED STAINING SCHEDULE

The following schedule is for Hp Yellow with Hp Blue.

1. Clearant x 3 ..... 3 minutes each
2. 100% alcohol x 2 ..... 1 minute each
3. 95% alcohol ..... 1 minute
4. 70% alcohol ..... 1 minute
5. Distilled or deionized water ..... 1 minute
6. 1% periodic acid ..... 10 minutes
7. Distilled or deionized water ..... rinse
8. Hp Yellow ..... 0.5–2.0 minutes
9. Distilled or deionized water ..... rinse
10. 10% acetic acid ..... 1.5–2.0 minutes
11. Tap water ..... 1 minute
12. Hp Blue ..... 0.5–5.0 minutes
13. Tap water ..... rinse well, 20 seconds
14. 100% ethanol/reagent alcohol x 2 ..... 15 seconds with agitation
15. 100% isopropanol ..... 15 seconds with agitation
16. Clearant x 3 ..... 1 minute each

Results: Mucus–yellow/green; *Helicobacter pylori*–dark blue; cytoplasm and nuclei–light blue

## DISPOSAL

1. Use a licensed waste hauler.
2. Discard into the sanitary sewer system with the approval of local wastewater officials.

## SAFETY DATA SHEETS (SDS)

SDS are available online at [www.cancerdiagnostics.com](http://www.cancerdiagnostics.com).

## ORDERING INFORMATION FOR HP STAINS

<u>Cat#</u>	<u>Packaging</u>
869	Hp Yellow, 1 quart
877	Hp Yellow, 1 gallon
870	Hp Blue, 1 quart
876	Hp Blue, 1 gallon
886	1% Periodic Acid, 1 gallon