
GEIMSA - HARLECO RAPID - HELICOBACTER

PURPOSE: Previously referred to as *Campylobacter pylori*. It is a gram negative spiral bacteria that is believed to be the cause of many gastric and peptic ulcers. The bacteria digest the mucus layer of the mucosal and surface cells, leaving the mucosa unprotected against the gastric acid. These bacteria can also be demonstrated with the silver spirochetes method and Acridine orange using the fluorescence microscope.

Differentiates cells present in hematopoietic tissue (lymph nodes), used in blood smears.

PURPOSE: The combination of the azure dyes (or methylene blue) and eosin are also known as Romanowsky stains, give a wide color range. Methylene blue in an alkaline pH solution stains metachromatic.

CONTROL: Stomach or colon tissue containing helicobacter. Skin for mast cells.

FIXATIVE: 10% formalin, Hollande's fixative.

TECHNIQUE: Cut paraffin sections 4-5 microns.

EQUIPMENT: Rinse glassware in DI water, coplin jars

SAFETY/PPE: Wear gloves, goggles and lab coat.

REAGENTS:

EOSIN:

Purchased through Shandon

0.25% Acetic Acid:

Acetic acid 1.0 ml

Distilled water 400.0 ml

Harleco Hemacolor 3:

Purchased through Baxter Scientific

Mix well, stable for 1 year.

CAUTION: Corrosive acid.

SAFETY: Wear gloves, goggles and lab coat. Avoid contact and inhalation.

PROCEDURE:

1. Deparaffinize and hydrate to distilled water.
2. Eosin, 2 minutes.
3. Drain off excess stain.
4. Hemacolor 3, (filtered) 3 minutes.
5. Quickly rinse in distilled water, 2 dips, 1 second each.
6. 0.25% acetic acid rinse, 2 quick dips, 1 second each.
7. Quickly rinse in distilled water, 2 dips, 1 second each.
8. Dehydrate, 2 quick dips, 1 second each in one 70% and two 100% alcohols.
9. Clear in xylene and coverslip.

RESULTS:

| | |
|-----------------|-------------------------|
| Helicobacter | dark blue |
| Mast cells | purple violet |
| Tissue elements | shades of blue and pink |

Prepared: _____ By: _____

Approved: _____ By: _____

PROCEDURE CARD

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3. Drain off excess stain.
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5. Quickly rinse in distilled water, 2 dips, 1 second each.
6. 0.25% acetic acid rinse, 2 quick dips, 1 second each.
7. Quickly rinse in distilled water, 2 dips, 1 second each.
8. Dehydrate quickly, 2 dips, 1 second each, one 70% and two 100% alcohols.
9. Clear in xylene and coverslip.

RESULTS:

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REAGENTS:

| | | |
|---------------------------|---------------------------|-----------|
| Eosin Y: | 0.25% Acetic Acid: | |
| Purchased through Shandon | Acetic acid | 25.0 ml |
| | Distilled water | 1000.0 ml |

Harleco Hemacolor 3:
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Mix well, stable for 1 year.

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0.25% Acetic Acid:

Acetic acid 25.0 ml
Distilled water 1000.0 ml

Mix well, stable for 1 year.

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DATE: _____

TECH: _____

EXPIRATION: _____

HEMACOLOR 2

DATE: _____

TECH: _____

HEMACOLOR 3

DATE: _____

TECH: _____