ELIstain Para-Color

Differential staining process of parasitic elements in stools

100 tests
(Ref. 66704)

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1 - AIM

ELIstain Para-Color is a reagent for staining of parasitic elements in stool during:

- A direct examination;
- An examination of sediments obtained after the concentration of parasitic elements by a two-phase method with the exception of the methods which have already employed a staining agent.

Each kit allows 100 tests to be carried

2 - INTRODUCTION

Many parasites (protozoa - helminths) can cause intestinal and hepatic events. The presence of these parasites in intestines or bile ducts was confirmed by macroscopic and microscopic examination of stool. Clinical manifestations, patient examination including the notion of living in endemic areas, laboratory tests results such as blood hypereosinophilia direct parasitological diagnosis and techniques to implement.

3 - PRINCIPLE

ELIstain Para-Color is a differential staining process of parasitic elements using a mixture of staining agents one of which is Lugol. Its utilization facilitates the detection of parasitic elements which appear to be yellow, yellow-orange or brownish-yellow on a moreor less dark blue background.

4 - REAGENT

Description	Quantity
R1: vial of 1 mL of Para-Color solution	1

5 - PRECAUTIONS

The reagent is intended for *in vitro* diagnostic use only and must be handled by authorized personnel.

- Tests are for single use only.
- Patient samples are potentially infectious. They must be handled with caution, in observance of hygiene rules and the current regulations for this type of product in the country of use.
- Do not use reagent after the expiry date.

PARA-COLOR GHS02 – GHS08 – GHS07

H225 : Highly flammable liquid and vapour.

H315 : Causes skin irritation.
H319 : Causes serious eye irritation.

H373 : May cause damage to organs through prolonged or repeated exposure.
P210 : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P235 : Keep cool.
P260 : Do not breathe vapours.
P403 : Store in a well-ventilated place.

6 - SAMPLE COLLECTION AND TREATMENT

Due to the fragility of some of parasitic stages as protozoa vegetative forms, it is recommended to treat stools as soon as possible after their collection.

7 - STABILITY, STORAGE AND PREPARATION OF REAGENT

The reagent is ready-to-use.
The reagent stored at 18-25°C, **sheltered from sunlight**, in its original packaging, is stable until the expiry date indicated on the box.
Do not freeze.

8 - MATERIAL REQUIRED BUT NOT SUPPLIED

- Automatic pipette(s) with a pipetting volume adapted to the volume that will be measured;
- Haemolysis tubes;
- Physiological saline;
- Taking stirrers;
- Vortex;
- Pasteur pipettes;
- Slides + coverglasses for microscopy;
- Microscope;
- Contaminated waste containers

9 - METHOD

Direct examination after staining by R1 reagent (Para-Color solution)

a. Homogenize stools.
b. Take out a volume of stools equivalent to the size of a pea and place it in a haemolysis tube containing 1 mL of thinner (physiological saline, distilled water or pH5 aceto-acetate buffer solution).
c. Triturate and shake it to obtain a homogeneous suspension (vortex shaker).
d. Using the micropipette, place 10 µLof R1 reagent on a slide.
e. Using the Pasteur pipette, add 1 drop (or, using the micropipette, add 25 µL) of the stools suspension to examine.
f. Mix well.
g. Place a coverglass over the stools suspension and examine by using a microscope having a white light (blue filter).

Examination of sediment obtained after the concentration of parasitic elements by a two-phase method

a. Put in a suspension the sediment obtained after a two-phase concentration method (ex: Bailenger's method) using 1 or 2 drops of physiological saline (do not allow the sediment to dry up).
b. Using the micropipette, place 10 µL of R1 reagent on a slide.
c. Using the Pasteur pipette, add 1 drop (or, using the micropipette, add 25 µL) of the suspension to examine.
d. Mix well.
e. Place a coverglass over the sediment suspension and examine under a microscope using a white light (blue filter).

10 - INTERPRETATION OF RESULTS

The parasitic elements appear to be yellow, yellow-orange or brownish-yellow on a more or less dark blue background.

11 - CAUSES OF ERROR AND TEST LIMITS

In all cases, it is necessary that the clinical, epidemiologic and biological data are taken fully into consideration before establishing the final diagnosis.

12 - PERFORMANCE

A comparative study between ELIstain Para-Color and examination without staining (direct or after concentration) showed that ELIstain Para-Color allowed the staining and the detection of helminth eggs, vegetative forms and cysts of protozoan.
The color difference between the parasitic elements (yellow or orange-yellow) and background (blue) allowed a fast microscopic detection of these and an easy identification.

13 - WASTE ELIMINATION

Waste should be disposed of in accordance with the hygiene rules and current regulations for this kind of product in the country of use. If the reagent is spilled, clean the work area with absorbent paper and rinse with water. If a sample is spilled on the work area, clean using bleach and absorbent paper.

14 - BIBLIOGRAPHY

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Changes from the previous version are highlighted in gray

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