BIOGNOST®

M.I.F. KIT

IVD *In vitro* diagnostic medical device CE

Merthiolate-Iodine-Formalin kit for detecting parasites in stool

INSTRUCTIONS FOR USE

REF Catalogue number: MIF-100T (for 100 tests) MIF-200T (for 200 tests)

Introduction

BioGnost's M.I.F. kit enables rapid and simple detection of parasites in stool, especially protozoa (amoeba). This method simultaneously fixes and stains the sample by providing optimal image for viewing nuclear structures necessary for identification of certain kinds of protozoa. Vegetative and cystic forms of parasites have different dye affinities. M.I.F. kit enables quality staining of parasites and provides concentration of parasitic elements on the surface of the sediment, but owing to quality fixation and preservation of samples for a prolonged period of time.

Product description

M.I.F. KIT – Kit for fixating and staining intestinal parasites.

The kit contains:	for 100 tests (MIF-100T)	for 200 tests (MIF-200T)
M.F. reagent	3 x 100 mL (MF-OT-100)	1 x 500 mL (MF-OT-500)
Lugol's solution, M.I.F.	1 x 25 mL (LUGM-OT-25)	1 x 100 mL (LUGM-OT-100)

Other sections, reagents and accessories that may be used in staining:

- Pasteur pipette (3 mL), micropipette for 250 µL
- Small spoon
- Vortex
- Waste material container
- Test tube with cap
- Glass slides used in histology, pathology and cytology, such as VitroGnost SUPER GRADE or VitroGnost COLOR , or one of 30 (and more) BioGnost's glass slides
- VitroGnost cover glass, dimensions range from 18x18 mm to 24x60 mm

Fixation and staining procedures

It is recommended to conduct the test as soon as possible after taking the sample because certain parasitic stages of vegetative protozoa are extremely fragile.

1.	Preparation of M.I.F. solution: add 0.25 ml (5-6 drops) of Lugol's solution, M.I.F. and 3 ml of M.F. reagent in the test tine with cap using micropipette
2.	Make the stool sample homogenous
3.	Use small spoon to take the sample (size of a pea) and place it in the previously prepared M.I.F. solution (step 1)
4.	Crush the stool sample by pressing it against the tube wall. Close the tube
5.	Make the sample homogenous using vortex
6.	Leave at room temperature and away from light for 24 hours until the mixture settles
7.	Take the sample from the **surface of sediment** (not supernatant!) and add 1 drop to the glass slide. Add 1 drop of distilled (demi) water and gently stir.
8.	Cover using cover glass and view using microscope
	Note: The sample may be viewed immediately, and it may be stored for a few months in a closed tube

Result

Vegetative and cystic forms of protozoa - pink-brown, different intensity
Eggs and larvae - easily noticed, not stained

Note

Time periods of staining processes are not entirely standardized in clinical and laboratory practical experience. Time periods specified in the instruction approximately correspond to a longtime work practice with optimal results. Intensity of staining depends on the period of immersion in the dye. Real staining protocol depends on personal requests and priorities.

Preparing the sample and diagnostics

Use only appropriate instruments for collecting and preparing the samples. Process the samples with modern technology and mark them clearly. Follow the manufacturer's instructions for handling and application. In order to avoid mistakes, the staining procedure and diagnostics should only be conducted by authorized and qualified personnel. Use only microscope according to standards of the medical diagnostic laboratory.

Safety at work and environmental protection

Handle the product in accordance with safety at work and environmental protection guidelines. Used solutions and out of date solutions should be disposed of as special waste in accordance with national guidelines. Chemicals used in this procedure could pose danger to human health. Tested tissue specimens are potentially infectious. Necessary safety measures for protecting human health should be taken in accordance with good laboratory practice. Act in accordance with signs and warnings notices printed on the product's label, as well as in BioGnost's material safety data sheet.

Storing, stability and expiry date

Keep M.I.F. kit in a tightly closed original package at temperature between 15°C and 25°C. Do not keep in cold places, do not freeze and avoid exposing to direct sunlight. Date of manufacture and expiry date are printed on the product's label.

References

1. Ochei, J. et Kolhatkar, A. (2000): Medical Laboratory Science Theory and practice, Tata McGraw-Hill Publishing Company Limited, New Delhi
2. Sehgal, R. (2003): Practicals and Viva in Medical Parasitology, 1st edition, Elsevier
3. Sood, R. (2006): Textbook of Medical Laboratory Technology, Jaypee Brothers Medical Publishers (P) Ltd., Daryaganj
4. Tille, P.M. (2014): Bailey and Scott'a Diagnostic Microbiology, 13th edition, Elsevier, Mosby

MIF-100T, V4-EN4, 28 April 2017, AK/VR

	Refer to the supplied documentation		Storage temperature range		Number of tests in package	REF	Product code		European Conformity		BIOGNOST Ltd. Medjugorska 59 10040 Zagreb CROATIA www.biognost.com
	Refer to supplied instructions		Keep away from heat and sunlight		Valid until	LOT	Lot number		Manufacturer		
IVD	For *in vitro* diagnostic use only		Keep in dry place		Caution - fragile						