Malarial Parasite-Kit

Intended Use:
Malarial Parasite-Kit is used for observation of malarial parasite in thick blood films

Composition**

Field's Stain A(S008)

<table>
<thead>
<tr>
<th>Ingredients</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Methylene blue</td>
<td>1.300 gm</td>
</tr>
<tr>
<td>Potassium phosphate</td>
<td>6.250 gm</td>
</tr>
<tr>
<td>Disodium hydrogen phosphate</td>
<td>5.000 gm</td>
</tr>
<tr>
<td>Fresh distilled water</td>
<td>550.000 ml</td>
</tr>
</tbody>
</table>

Field's Stain B(S009)

<table>
<thead>
<tr>
<th>Ingredients</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Eosin</td>
<td>1.300 gm</td>
</tr>
<tr>
<td>Disodium hydrogen phosphate</td>
<td>5.000 gm</td>
</tr>
<tr>
<td>Potassium dihydrogen phosphate</td>
<td>6.250 gm</td>
</tr>
<tr>
<td>Distilled water</td>
<td>500.000 ml</td>
</tr>
</tbody>
</table>

**Formula adjusted, standardized to suit performance parameters

Directions

1) Dry the blood film and immerse in methanol for 2-3 minutes.
2) Blow off with Fields Stain A (S008) for 2-3 seconds.
3) Wash it with distilled water, and again blow with Fields Stain B (S009) for 2-3 seconds and wash with distilled water.
4) Dry it and observe under microscope.

Principle And Interpretation

Field Stains contain methylene blue and eosin. These basic and acidic dyes induce multiple colours when applied to cells. The fixative, methanol does not allow any further change in slide. The basic component of white cells (cytoplasm) is stained by acidic dye and they are described as eosinophilic or acidophilic. The acidic component (nucleus with nuclei acid) takes blue to purple shades of the basic dye and are called basophilic. The neutral component of the cells are stained by both the dyes. This staining method is used for screening thick films of malarial parasites.

Type of specimen

Clinical samples: Blood sample

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines( 1,2).

After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

In Vitro diagnostic use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations

1) Films for malaria must be made immediately or no longer than 3-4 hours after blood collection.
2) Methanol used as fixative should be completely water free. As little as 1% water may affect the appearance of the films and a higher water content causes gross changes.
3) The red cells will also be affected by traces of detergent on inadequately washed slides.
4) Sometimes when thick films are stained they become overlaid by a residue of stain or spoil by the envelopes of the lysed red cells.

Please refer disclaimer Overleaf.
Performance and Evaluation
Performance of the stain is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control
Appearance
S008, Field's stain A: Dark violet coloured clear solution without any particles.
S009, Field's stain B: Orange coloured clear solution without any particles.

Microscopic examination
Blood staining is carried out and staining characteristics is observed under microscope.

Results
Nuclei: blue
Neutrophilic granules: lilac
Eosinophilic granules: orange
Red cells: pink

Storage and Shelf Life
Store between 10 - 30°C in tightly closed container and away from bright light. Use before expiry date on label. On opening, product should be properly stored in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use.

Disposal
User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (3,4).

Reference
5. Staining Procedures, Fourth Edition; Williams & Wilkins; Baltimore

Disclaimer:
User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related HiMedia™ publications. The information contained in this publication is based on our research and development work and is to the best of our knowledge true and accurate. HiMedia™ Laboratories Pvt Ltd reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal or therapeutic use but for laboratory, diagnostic, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.