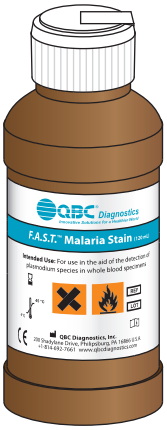
PARAWORLD™ Training Resources

F.A.S.T.™ Malaria Stain User Guide



_F.A.S.T._ Products used in specimen staining:

One (1) Bottle *F.A.S.T.* Malaria Stain

F.A.S.T. Microscope Slides (or other microscope slides)

Thin Film Staining Instructions

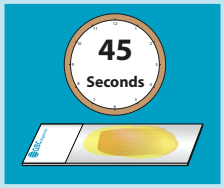
1. Process Sample

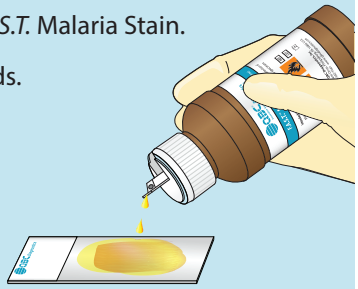
Prepare thin film smear and fix according to your laboratory's protocols.

2. Apply Stain

Flood the fixed smear with *F.A.S.T.* Malaria Stain.

Allow stain to set for 45 seconds.





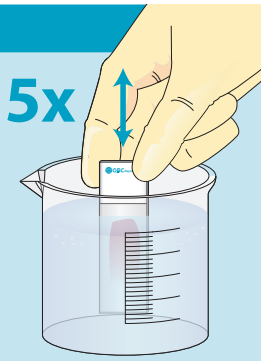
3. Remove Stain

Pour stain off of slide.

Tap off excess.

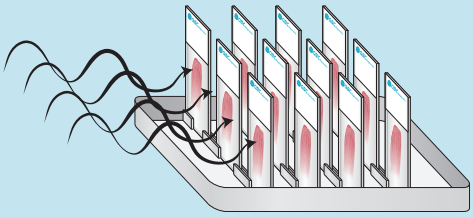
Gently dip into fresh water 5 times.

Do not stir or agitate the water with the slide.



4. Dry Slide

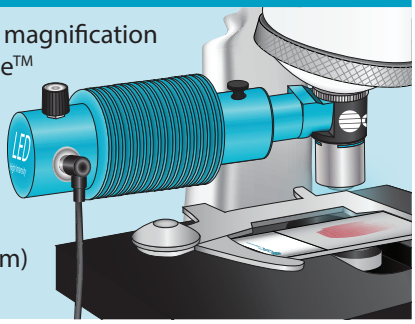
Allow slide to air dry while standing vertically.



If necessary, gently blot excess water with a lint free tissue.

5. Examine Sample

Examine the slide at 1000x magnification using the ParaLens Advance™ LED fluorescence microscope attachment, or fluorescence microscope with light and filter set capable of producing blue (400-480 nm) excitation light.

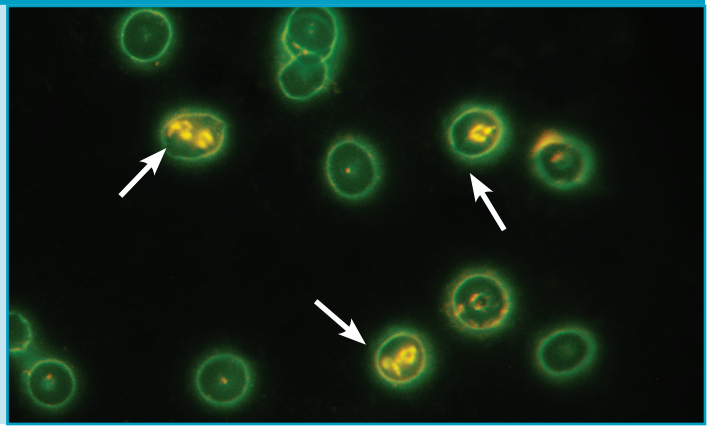


Thin Film Review

At right: *P. falciparum* malaria parasites (some, but not all, highlighted with white arrows) are seen at 1000x magnification. Note the double infection in the left and bottom red blood cells.

Malaria parasites stained with *F.A.S.T.* Malaria Stain will exhibit yellow-gold fluorescence and will be inside of green RBCs. White Blood Cells (WBCs) and platelets will also exhibit some fluorescence, but are easily distinguishable from malaria parasites.

Examine the monolayer of Red Blood Cells (RBCs) for malaria infections. At least 100 microscopic fields must be examined before reporting the slide as negative.

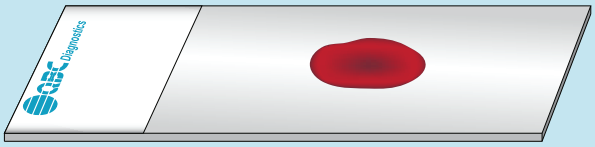


F.A.S.T.™ Malaria Stain User Guide

Thick Film Staining Instructions

1. Process Sample

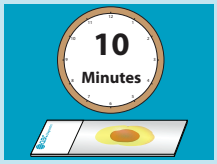
Prepare thick film smear according to your laboratory's protocols.



2. Apply Stain

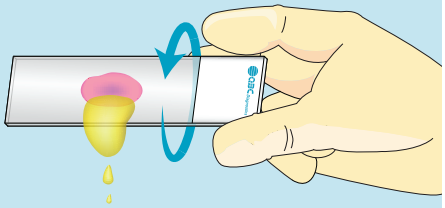
Flood the fixed smear with *F.A.S.T.* Malaria Stain.

Allow the stain to set for 10 minutes.



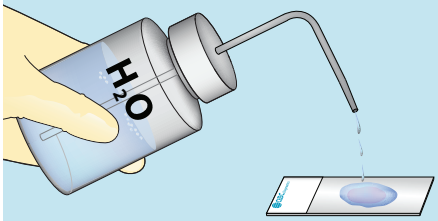
3. Remove Stain

Pour stain off of slide. Tap off excess.

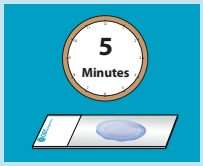


4. Flood Slide

Gently, completely flood slide with fresh water.

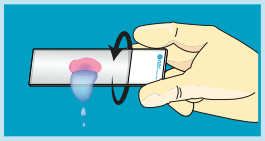


Hold for 5 minutes.

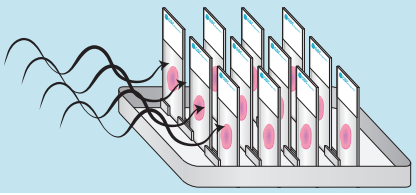


5. Dry Slide

Pour off remaining water.

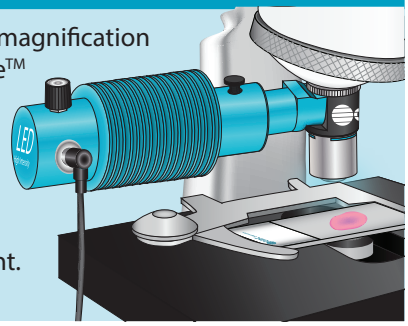


Allow slide to air dry while standing vertically.



6. Examine Sample

Examine the slide at 1000x magnification using the ParaLens Advance™ LED fluorescence microscope attachment, or fluorescence microscope with light and filter set capable of producing blue (400-480 nm) excitation light.

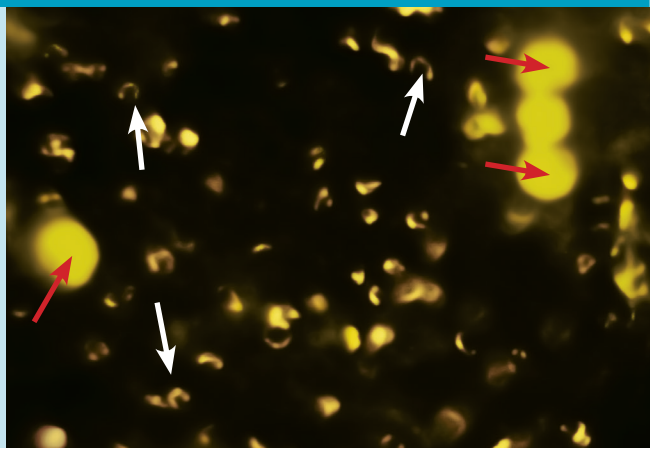


Thick Film Review

At right: Multiple malaria parasites (some, but not all, highlighted with white arrows) are visible in this sample at 1000x magnification. Note that the ring or "headphone" shape typical of immature trophozoites is distinct from WBCs (some, but not all, highlighted with red arrows) present in the sample.

Malaria parasites stained with *F.A.S.T.* Malaria Stain will exhibit a yellow-gold fluorescence and morphology typical of malaria life stages. White Blood Cells (WBCs) and platelets will also exhibit fluorescence but are easily distinguishable from malaria.

Examine thick film in a 2 systematic review pattern for malaria infections. At least 100 microscopic fields must be examined before reporting the slide as negative.



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