

partec

CyScope®

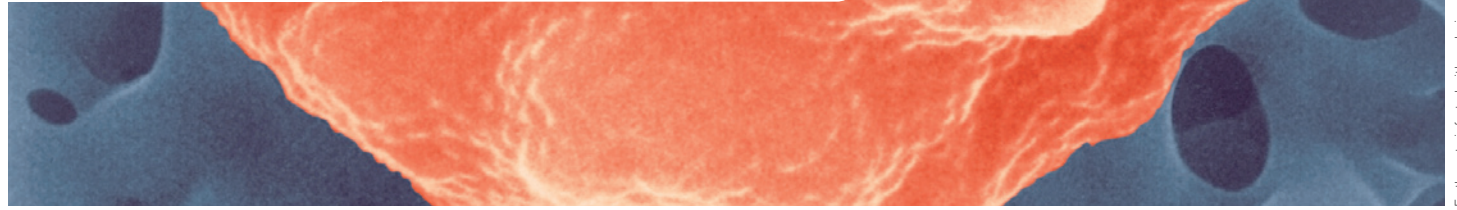
Essential Healthcare:
Malaria Diagnostics



Portable and Battery-Operated Fluorescence Microscope
for Ultrarapid Malaria Diagnostics

01 BACKGROUND

CyScope® Fluorescence Microscope



Erythrocyte infected with malaria parasite (Plasmodium falciparum)
Image Copyright Dennis Kunkel Microscopy, Inc.

| Malaria – a Global Disease

Malaria is one of the most dangerous diseases and is endemic in over 100 countries according to recent WHO/UNICEF studies. Malaria is caused by Plasmodium sp., a parasitic single-celled protozoan. It is spread to humans by species of tropical mosquitoes (Anopheles sp.). The infection spreads from the liver to the blood, where the plasmodium multiplies inside red blood cells. The plasmodial parasite reproduces in the red blood cells significantly destroying many erythrocytes. Release of mature Plasmodium results in further infection and leads to bouts of paroxysms (shivering fever) and sweating that may be fatal.

Despite the fact that Malaria is preventable and treatable, according to WHO up to 300 million people are infected by Malaria every year, with more than 1 million death cases - this includes at least one child lost every 30 seconds.

A safe, easy, and in particular rapid diagnostic test is of great importance for malaria treatment. Microscopic detection of the parasites is the standard method of diagnosis. Up to now, the traditional Giemsa method is used for staining blood films. This procedure takes several steps and long time until the user can find the result by examination of the slide on a standard microscope. In addition, the Giemsa stain has to be prepared fresh and the costs per test are about EUR 2.00. New easy-to-use, accurate, and affordable diagnostics therefore play the key role for significantly improved patient services in Malaria prevention and treatment. With dedicated reliable and rapid diagnostic techniques and innovative protocols employing a new class of portable and battery-operated highly affordable fluorescence microscopes for less than EUR 1000 with test cost of EUR 0.50 only, Partec Essential Healthcare is supporting the global fight against Malaria.

| CyScope® Features

The Partec CyScope® is a new uniquely innovative microscope for fluorescence light detection employing incident UV light and transmitted light detection, simultaneously or in separate. It integrates the most recently available generation of powerful LED light sources with extremely long lifetime of several thousand of hours and highest efficiency as well as most sophisticated optics. For the first time, a fluorescence microscope is being offered battery-operated and mobile, designed for several hours of use completely independent from any regular power supply! The CyScope® is perfectly suited for all applications in light and fluorescence microscopy. The CyScope® is developed and produced in Germany following the long German tradition in manufacturing highest quality techniques in optics and microscopy.

| Partec Rapid Malaria Test

The "Partec Rapid Malaria Test" in combination with the Partec CyScope® offers a uniquely easy and ultrarapid protocol for reliable Malaria diagnostics: By delivering ready-prepared and ready-to-use test slides which already carry the dried-in reagents safely on the slide surface (therefore long-term storage and shipment are significantly supported), Malaria testing has become easier, faster, and more affordable than ever before.

02 HIGHLIGHTS

CyScope® Fluorescence Microscope

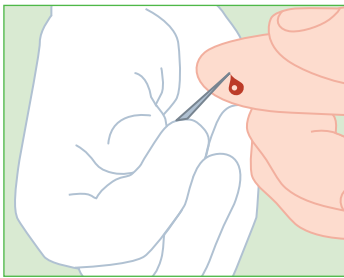
- _ most easy and rapid Malaria diagnostics for all settings
- _ ready-prepared and ready-to-use Malaria test slides with dried-in reagents
- _ highly affordable: CyScope® instrument: EUR 990.00
Malaria test cost: EUR 0.50
- _ reliable performance
- _ ultracompact and robust microscope design
- _ dimension: 295(H) x 90/140(W) x 170(D) [mm] weight: 2.7 kg
- _ high power UV LED (365nm, other wavelength optional) for incident fluorescence excitation
- _ white light LED for transmitted light
- _ achromate objectives: 20x, 40x, 100x - oil immersion
- _ CCD camera connector
- _ eye piece: 10x wide-field
- _ built-in camera interface
- _ power supply:
built-in rechargeable batteries
- _ microprocessor controlled battery charger
- _ including dedicated aluminum suitcase for transport



03 ANALYZE

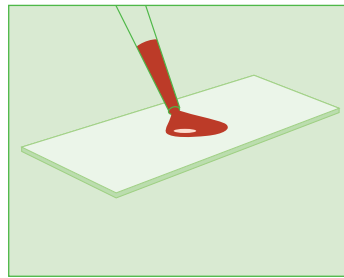
CyScope® Fluorescence Microscope

„The Partec Rapid Malaria Test“ Kit makes the staining very easy and fast. Just put a drop of blood from finger prick onto the glass slide. The slides are already prepared with dried reagents. Directly cover the slide and analyze on the CyScope®.



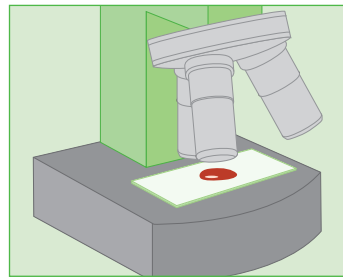
Step 1

Take a drop of blood from a finger prick



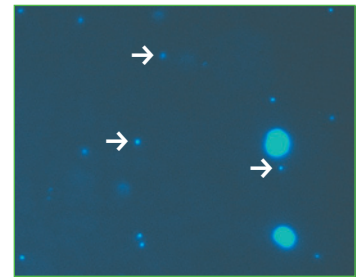
Step 2

Put the drop of blood onto the Partec Malaria Test Slide (delivered ready-prepared, already containing the necessary reagents dried-in for long and safe storage)



Step 3

Cover the slide with a cover glass and directly analyze the slide with the Partec CyScope®



Step 4

Picture shot from analysis with "Partec Rapid Malaria Test": Malaria parasites (small bright spots, exemplary marked by arrows) besides two human white blood cells.

Order numbers and prices

CyScope® with Accessories EUR 990.-
Order No. CY-S-4001

CyScope® CCD Camera Upgrade EUR 390.-
High Resolution USB Camera including Software
Order No. CY-S-4011

Partec Rapid Easy Malaria Test EUR 100.-
Test Slides (200 pcs)
Order No. 05-8951



partec

Partec GmbH · Otto-Hahn-Straße 32 · D-48161 Münster · Germany
Fon +49 2534 8008-0 · Fax +49 2534 8008-90
Mail: info@partec.com · Web: www.partec.com