

Materials List for:

Detection and Quantification of *Plasmodium falciparum* in Aqueous Red Blood Cells by Attenuated Total Reflection Infrared Spectroscopy and Multivariate Data Analysis

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Materials

| Name | Company | Catalog Number | Comments |
|--|-------------------------------|-----------------|--|
| Donor blood | - | - | Must be collected by a trained medical practitioner |
| Stock blood | Australian Red Cross` | - | |
| 3D7 Plasmodium falciparum | The Burnet Institute | - | Laboratory strain wild type equivalent |
| RPMI-1640 media with L-hepes without Sodium Bicarbonate | Sigma Aldrich | R6504 | |
| Albumax (Gibco) | Thermofisher | E003000PJ | Aliquot into 50 mL falcon tubes and store in freezer |
| Sodium Bicarbonate | Sigma Aldrich | S5761 | |
| Giemsa Stain | Sigma Aldrich | 48900 | |
| Sorbitol | Sigma Aldrich | S1876 | Must be filtered before use in culture |
| Blood collection tubes (Vacutainers) | Becton, Dickonson and Company | 367671 | |
| Immersion Oil | Thermofisher | M3004 | |
| 50 mL culture dishes | Falcon | 353025 | |
| 25mL pipette tips | Falcon | 357515 | |
| 10mL pipette tips | Falcon | 357530 | |
| Microscope Slides | Sigma Aldrich | S8902 | |
| Centrifuge tubes 50 mL | Sigma Aldrich | T2318 | |
| Automated pipette controller | Integra-biosciences | 155 015 | |
| Sorvall Legend X1R Centrifuge | Thermofisher | 75004260 | |
| Forma™ 310 Direct Heat CO2 Incubators | Thermofisher | 310TS | |
| Nikon Eclipse E-100 Binocular Microscope | Nikon Instruments | E100_2CE-MRTK-1 | When purchasing ensure that the 100x lens is an oil immersion lens |
| Bruker Alpha Ft-IR Spectrometer with ATR Quick Snap Attachment | Bruker | 9308-3700 | Be sure to request "Eco-ATR" attachment when purchasing |
| Matlab | Mathworks Inc | | Multivariate data analysis software |
| The Unscrambler X | CAMO | | Multivariate data analysis software |
| PLS-Toolbox | Mathworks, Inc. | | GUI for Matlab |