## SUPPORTING INFECTIOUS DISEASE RESEARCH

## Plasmodium falciparum SenTh090.09

Catalog No. MRA-1191
This reagent is the tangible property of the U.S. government.
Product Description: Human patient $P$. falciparum isolate, Thiès, Senegal
Lot: 61825585
Manufacturing Date: 26NOV2013

| TEST | SPECIFICATIONS | RESULTS |
| :---: | :---: | :---: |
| Identification by Giemsa stain microscopy of cultured blood smears | Blood stage malaria parasites present in infected human erythrocytes (rings, trophozoites, schizonts +/gametocytes) | Report presence Parasites present |
| Cell Viability pre-cryopreservation | Report parasitemia (\% infected erythrocytes) in in vitro cultured erythrocytes at time of cryopreservation as assessed by microscopy of Giemsa stained blood smears. | Report results <br> Parasitemia @ 3.98\%. |
| Speciation and Genotype | Speciation by Plasmodium falciparum specific MSP2 PCR; strain-specific MSP2 genotype by MSP2 signature sequence analysis MSP2 amplicon present within range 600-900 bp diagnostic for $P$. falciparum species; MSP2 sequence unique to each parasite strain lineage (report only) | Report PCR result, attach sequence file Single band amplicon observed, msp2 signature sequence attached. |
| Antimalarial Susceptibility Test | Determine half-maximal inhibitory concentration ( $\mathrm{IC}_{50}$ ) in Plasmodium falciparum in vitro culture | Report results and method used to determine the concentration. <br> MRA-1191Lot 61825585 was screened for susceptibility to Chloroquine (CQ), Artemisinin (ART), Quinine (QN), Cycloguanil (CYC), Pyrimethamine (PYR) and Sulfadoxine (SDX) using a SYBR Green I® anti-malarial drug sensitivity assay in 96 well plate in vitro culture (Hartwig et al. Methods in Malaria Research $5^{\text {th }}$ edition, 2013). IC50 results are attached. |
| Cell viability post-cryopreservation | Report parasitemia in in vitro blood culture 72-96 Hr post inoculation | Report parasitemia <br> 1.57\% parasitemia @ 72 Hr . |

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| Sterility (21-day incubation) |  | Report results |
| :--- | :--- | :--- |
| Harpo's HTYE broth, $37^{\circ} \mathrm{C}$ and $26^{\circ} \mathrm{C}$, aerobic | No growth | No growth |
| Trypticase soy broth, $37^{\circ} \mathrm{C}$ and $26^{\circ} \mathrm{C}$, aerobic | No growth | No growth |
| Sabouraud broth, $37^{\circ} \mathrm{C}$ and $26^{\circ} \mathrm{C}$, aerobic | No growth | No growth |
| Sheep blood agar, $37^{\circ} \mathrm{C}$, aerobic | No growth |  |
| Sheep blood agar, $37^{\circ} \mathrm{C}$, anaerobic | No growth | No growth |
| Thioglycollate broth, $37^{\circ} \mathrm{C}$, anaerobic | No growth | No growth |
| DMEM with $10 \% \mathrm{FBS}, 37^{\circ} \mathrm{C}$ and $5 \% \mathrm{CO} 2$ | No growth | No growth |

Date: $\qquad$ 17 Dec. 2013

Signature:


Title: Technical Manager, BEI Authentication or designee
ATCC ${ }^{\circledR}$, on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected by the contractor to the tests and procedures specified and that the results described, along with any other data provided in this certificate, are true and accurate to the best of $\mathrm{ATCC}^{\circledR}$ 's knowledge.

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MRA-1191 P. falciparum SenTh090.09 msp2 signature
>MRA-1191_61825585
AGTGTTGCTGAAATTAAAACAACAAATTTATTTATTGAAGCAATATTACTAGAGTTATTTAAGAGGGATGTTGCTGCTCC ACAGTTTTCTTTGTTACCATGGGTACATTCTTTTTGACTATCAGAAGTATTTTGTGGATGATTATTTCTAGAACCATGCA TATGTCCATGTTGTCCTGTACCTTTATTCTCTGGTGCAGATTGTAATTCGGGGGATTCAGTTTGTTCGGCTGTTGGAGCA GAATTTTCAGCTTGTTCAGGTTGTGCAGTAGGACTTTTAGTGTCTGCATCTTGAGTGGGTGGAACATTTGATTTAGTTTG AGAGTCTTGTTGAACATTTGAGTTATTTTGAGTTTCTTTATTTGCTTGATTTGGTTCTTGAACTTCTCCTTTACCTTTTG GATTTGTTTCGGCATTTTTATGATTTGGATTTTCTGAAGAGGTACTGGTAGATGCTTCTGCATCATTAGTAGTTGTGGTA GTTGTGGTAGTTTTGGTAGTTGTGGTAGTAGCGGGAGTACTTGAACTTCCCTCAGCATCTGCACCAGGATTAGCACCATT ACGAGCACTAGCAACAGCACCATCACCAGAACCAGCACTACCACTAGCACCAGCACCAGAACCAGCACTACCACTAGCAC CAGCACCAGAACCAGTAGGAGTCTTACTTTCTGCCATACTTCTCCTTATACTCATATTATAAGCATTGTTTATGAATGTG TTGCTATATTTACTTTCATTTTTAATATTAAAGGTAAC

MRA-1191 P. falciparum SenTh090.09 Antimalarial susceptibility


