

**Plasmodium falciparum, Strain CS2**

**Catalog No. MRA-96**

**Product Description:** *Plasmodium falciparum* (*P. falciparum*), strain CS2 was derived from strain FAF-EA8, a derivative of the Brazilian isolate ItG2, in 1994, by panning for adhesion on Chinese hamster ovary cells and then immobilized chondroitin sulfate A (CSA). *P. falciparum*, strain CS2 binds to CSA and hyaluronic acid (HA) and exhibits low binding to CD36 and no binding to ICAM-1. It is used for examination of parasite adhesion to CSA and HA and the role of host immune responses.

**Lot<sup>1</sup>: 60918111**

**Manufacturing Date: 10MAY2012**

TEST	SPECIFICATIONS	RESULTS
Identification by Giemsa Stain Microscopy <sup>2</sup>	Blood-stage parasites present	Blood-stage parasites present
Level of Ring-Stage Parasitemia Pre-freeze <sup>3</sup> Post-freeze <sup>4</sup>	Report results Report results	3.32% 1.53%
Viability (post-freeze) <sup>5</sup>	Growth in infected red blood cells	Growth in infected red blood cells
Mycoplasma Contamination DNA Detection by PCR	None detected	None detected

<sup>1</sup>MRA-96 was produced by cultivation of MRA-96 lot 58193123 in fresh human erythrocytes suspended in RPMI 1640 medium, adjusted to contain 10% (v/v) heat-inactivated human serum (pooled Type A), 25 mM HEPES, 2 mM L-glutamine, 4 g/L D-glucose, 0.005 µg/mL hypoxanthine and 2.5 µg/mL gentamicin. The culture was incubated at 37°C in sealed flasks outgassed with blood-gas atmosphere (90% N<sub>2</sub>, 5% CO<sub>2</sub>, 5% O<sub>2</sub>) and monitored for parasitemia daily for 16 days. Uninfected, leukocyte filtered, Type O erythrocytes in complete culture medium were added dropwise to the culture as needed and monitored for hematocrit.

<sup>2</sup>Blood-stage malaria parasites (rings, trophozoites, schizonts +/- gametocytes) were examined by microscopic Giemsa-stained blood smears of an *in vitro* human blood culture over 4 days.

<sup>3</sup>Pre-freeze parasitemia was determined after 16 days post infection by microscopic counts of Giemsa-stained blood smears.

<sup>4</sup>Post-freeze parasitemia was determined after 4 days post infection by microscopic counts of Giemsa-stained blood smears.

<sup>5</sup>Viability was confirmed by examination of infected erythrocytes for parasitemia at 4 days post infection.

15 FEB 2018

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