

-continued

<210> SEQ ID NO 10  
 <211> LENGTH: 23  
 <212> TYPE: DNA  
 <213> ORGANISM: Artificial Sequence  
 <220> FEATURE:  
 <223> OTHER INFORMATION: PCR primer

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23

What is claimed is:

1. A recombinant merozoite surface protein-1 (MSP-1<sub>42</sub>) from *P. falciparum* FVO comprising the sequence set forth as SEQ ID NO:2 that is recombinantly expressed in *E. coli* as a soluble protein that retains its native folding.

2. A composition comprising the recombinant *P. falciparum* FVO MSP-1<sub>42</sub> of claim 1 and a pharmaceutically acceptable carrier.

3. The recombinant protein according to claim 1 wherein said protein is at least 95% pure.

4. The recombinant protein according to claim 1, wherein said protein is at least 90% pure.

5. The recombinant protein according to claim 1 wherein said protein is at least 97% pure.

6. The recombinant protein according to claim 1 wherein said purified protein is at least 98% pure.

7. The recombinant protein according to claim 1 wherein said protein is at least 99% pure.

8. An immunogenic carrier comprising a protein according to claim 1.

9. A kit for determining the presence of malaria antibodies in a biological sample, comprising: at least one MSP-1<sub>42</sub> according to claim 1, and a buffer or components necessary for producing a buffer.

15 10. A kit for monitoring malaria infection in response to treatment of patients suffering from malaria infection comprising: at least one MSP-1<sub>42</sub> according to claim 1, and a buffer or buffer components.

20 11. A vaccine against malaria comprising the recombinant *P. falciparum* FVO MSP-1<sub>42</sub> of claim 1.

12. The vaccine of claim 11 further comprising an adjuvant.

25 13. The vaccine of claim 12 wherein said adjuvant is chosen from the group consisting of: montanide and alum.

14. The vaccine of claim 12 wherein said adjuvant is ADJUVANT B.

30 15. A multivalent vaccine for protection against infection with more than one strain of *P. falciparum* comprising at least one MSP-1<sub>42</sub> according to claim 1 and at least one MSP-1<sub>42</sub> selected from the group consisting of 3D7 and CAMP.

35 16. The multivalent vaccine of claim 15, further comprising an adjuvant selected from the group consisting of montanide and alum.

17. The multivalent vaccine of claim 15 further comprising ADJUVANT B.

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