

**Plasmodium berghei, Strain ANKA**

**Catalog No. MRA-671**

**Product Description:**

*Plasmodium berghei* (*P. berghei*), strain ANKA was isolated in July 1965 from *Anopheles durenii millescampsii* mosquitoes collected in the River Kasapa, Democratic Republic of Congo. MRA-671 was produced by inoculation of seed lot into BALB/c mice. Infection was allowed to progress for 4 days. Infected blood was collected by orbital bleeding and used to inoculate BALB/c mice. Infection was allowed to progress until parasitemia reached > 5%. After 3 days, infected blood was collected by orbital bleeding.

**Lot: 63464828**

**Manufacturing Date: 14APR2015**

TEST	SPECIFICATIONS	RESULTS
<b>Genotypic Analysis<sup>1</sup></b> Sequencing Circumsporozoite Surface Protein 1 (CSP1) gene (1020 base pairs)	≥ 99% sequence identity to <i>P. berghei</i> , strain ANKA (GenBank: LK023119)	99.8% sequence identity to <i>P. berghei</i> , strain ANKA (GenBank: LK023119) (Figure 1)
<b>Functional Activity by PCR Amplification<sup>1</sup></b> CSP1 PCR amplicon analysis	~ 900-1100 base pair amplicon	~ 1100 base pair amplicon
<b>Level of Parasitemia</b> Pre-freeze (3 days post-infection) <sup>2</sup> Post-freeze (3 days post-infection) <sup>1</sup>	Report results ≥ 1%	> 10% > 10%
<b>Viability (3 days post-infection)<sup>1</sup></b>	Growth in inoculated mice	Growth in inoculated mice

<sup>1</sup>Testing completed on vial, post-freeze material

<sup>2</sup>Testing completed on bulk material prior to vialing and freezing

**Figure 1: MRA-671 CSP1 Sequence**

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TTAATTTAAA GAATACTAAT ACTAATAATA TTACAAATCC TAATGAATTG CTTACAATAT TAAATATACT TGAACATTTA
TCCATTTTAC AAATTTTCAGT ATCAATATCT TCTAAGGTCA AATCTTCTGC TTTCTTATTT GAACCTTTTC GTTTTCTAAC
TCTTATACCA GAACCACATG TTACGTTACA TTGAGACCAT TCCTCTGTGA TACTATCCCT GATCTGTTTA ACAAATTCTA
GTATTTTTTC CGCGCTTGGG ATATAAGAAT CGTCATTATT ATTATTTTTG TTATTGTTAT TACCACCTGG CTGTGGTTGT
GGCTGTGGTC GTGGCTGTGG TTGTGGCTGT GGCTGTGGTT GTGGCTGTGG CTGTGGTTGT GGCTGCGGCC GTGGCTGTGG
TTGTGGATTG TTATTTCCCT GTGGTGGTGC TGGGTCATTT GGGTTTGGTG GTGGTGGGTC ATTTGCGTTT GGTGGTGTCTG
GGTCATTTGG GTTTGGTGGT GGTGGGTCAT TTGCGTTTGG TGGTGCTGGG TCATTTGCGT TTGGTGGTGC TGGGTCATTT
GCGTTTGGTG GTGCTGGGTC ATTTGCGTTT GGTGGTGGTG GGTCATTTGC GTTTGGTGGT GGTGGGTCAT TTGGGTTTGG
TGGTGGTGGG TCATTTGGGT TTGGTGGTGG TGGGTCATTT GGGTTTGGTG GTGGTGGGTC ATTTGGGTTT GGTGGTGGTG
GGTCATTTGG GTTTGGTGGT GGTGGTGGTT GTTTCAATTT ATTATTACGC TCTATTTTTT CGTTTTTTTT CTCATTTTTT
TTTCCTTCGG GAGCATCGGC AAGTAATCTG TTGACTGTAT TTCGATTGTA TATTTTTTCA TTCTTAGAGT TAAGCACGTG
ATACAATTTA TTATCATTTT CTTCATTGTA ACATAGCTCG TTTAAGTTCC TTTGGGCTTG GATGCTTTTA TTTTGTCCAT
ATCCTGGAAG TAGAGAATTA ACTAATAAAA GTGACGCTAC AACTAAAATG GTACACTTCT
    
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