

Plasmodium berghei, Strain ANKA

Catalog No. MRA-671

Product Description:

Plasmodium berghei (*P. berghei*), strain ANKA was isolated in July 1965 from *Anopheles durenii millecampsii* mosquitoes collected in the River Kasapa, Democratic Republic of Congo. MRA-671 was produced by inoculation of seed lot into ND4 Swiss Webster mice. Infection was allowed to progress for 3 days. Infected blood was collected by orbital bleeding and used to inoculate ND4 Swiss Webster mice. Infection was allowed to progress until parasitemia reached > 5%. After 6 days, infected blood was collected by orbital bleeding.

Lot: 70028515

Manufacturing Date: 31OCT2019

TEST	SPECIFICATIONS	RESULTS
Genotypic Analysis¹ Sequencing Circumsporozoite Surface Protein 1 (CSP1) gene (~ 1280 base pairs)	≥ 99% sequence identity to <i>P. berghei</i> , strain ANKA (GenBank: LK023119)	99.6% sequence identity to <i>P. berghei</i> , strain ANKA (GenBank: LK023119) (Figure 1)
Functional Activity by PCR Amplification¹ CSP1 PCR amplicon analysis	~ 900-1100 base pair amplicon	~ 1100 base pair amplicon
Level of Parasitemia Pre-freeze (6 days post-infection) ² Post-freeze (5 days post-infection) ¹	Report results ≥ 1%	11.05% 6.85%
Viability (5 days post-infection)¹	Growth in inoculated mice	Growth in inoculated mice

¹Testing completed on vial, post-freeze material

²Testing completed on bulk material prior to vialing and freezing

Figure 1: MRA-671 CSP1 Sequence

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GTGTACCATT TTAGTTGTAG CGTCACTTTT ATTAGTTAAT TCTCTACTTC CAGGATATGG AAAAAATAAA AGCATCCAAG
CCCAAAGGAA CTTAAACGAG CTATGTTACA ATGAAGGAAA TGATAATAAA TTGTATCACG TGCTTAACTC TAAGAATGGA
AAAATATACA ATCGAAATAC AGTCAACAGA TTAGTTGCGG ATGCTCCCGA AGGAAAAAAA AATGAGAAAA AAAACGAAAA
AATAGAGCGT AATAATAAAT TGAAACAACC ACCACCACCA CCAAACCCAA ATGACCCACC ACCACCAAAC CCAAATGACC
CACCACCACC AAACCCAAAT GACCCACCAC CACCAAACCC AAATGACCCA CCACCACCAA ACSCAAATGA CCCACCACCA
CCAAACGCAA ATGACCCAGC ACCACCAAAC GCAAATGACC CACCACCACC AAACGCAAAT GACCCACCAC CACCAAACGC
AAATGACCCA CCACCACCAA ACCCAAATGA CCCACCACCA CCAAACSCAA ATGACCCACC ACCACCAAAC CCAAATGACC
CACCACCACC AAACSCAAAT GACCCACCAC CACCAAACCC AAATGACCCA CCACCACCAA ACCCAAATGA CCCACCACCA
CCAAACCCAA ATGACCCACC ACCACCAAAC CCAAATGACC CACCACCACC AAACGCAAAT GACCCACCAC CACCAAACGC
AAATGACCCA GCACCACCAA ACGCAAATGA CCCAGCACCA CCAAACGCAA ATGACCCAGC ACCACCAAAC GCAAATGACC
CACCACCACC AAACCCAAAT GACCCAGCAC CACCAAACGC AAATGACCCA CCACCACCAA ACCCAAATGA CCCAGCACCA
CCACAAGGAA ATAACAATCC ACAACCACAG CCACGGCCGC AGCCACAACC ACAGCCACAG CCACAACCAC AGCCACAGCC
ACAACCACAG CCACGACCAC AGCCACAACC ACAGCCAGGT GGTAATAACA ATAACAAAAA TAATAATAAT GACGATTCTT
ATATCCCAAG CGCGAAAAAA ATACTAGAAT TTGTTAAACA GATCAGGGAT AGTATCACAG AGGAATGGTC TCAATGTAAC
GTAACATGTG GTTCTGGTAT AAGAGTTAGA AAACGAAAAG GTTCAAATAA GAAAGCAGAA GATTTGACCT TAGAAGATAT
TGATACTGAA ATTTGTAAAA TGGATAAATG TTCAAGTATA TTTAATATTG TAAGCAATTC ATTAGGATTT GTAATATTA
    
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/Heather Couch/

Heather Couch

Program Manager or designee, ATCC Federal Solutions

13 OCT 2020

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