

Plasmodium yoelii subsp. yoelii, Strain 17XNL(1.1)

Catalog No. MRA-593

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Product Description:

Plasmodium yoelii subsp. *yoelii* (*P. yoelii* subsp. *yoelii*), strain 17XNL(1.1) was cloned from *P. yoelii* subsp. *yoelii*, strain 17XNL by injection of sporozoites at limiting dilution into naïve mice. *P. yoelii* subsp. *yoelii*, strain 17XNL is a non-lethal line of the 17X strain, which was originally isolated by I. Landau from wild-caught thicket rat (*Thamnomys rutilans*) no. 17X, at La Maboké Field Station in Central African Republic, April 1965. MRA-593 was produced by inoculation of seed material into 3 Swiss Webster ND4 mice. Infection was allowed to progress for 7 days. Infected blood was collected by orbital bleeding and used to inoculate 18 Swiss Webster ND4 mice. Infection was allowed to progress until parasitemia reached 7%. Infected blood was collected by orbital bleeding.

Lot: 70033223

Manufacturing Date: 20MAR2020

TEST	SPECIFICATIONS	RESULTS
Genotypic Analysis¹ Sequencing of Circumsporozoite Surface Protein 1 (CSP1) gene (~ 1130 base pairs)	≥ 95% sequence identity to <i>P. yoelii</i> subsp. <i>yoelii</i> , strain 17XNL(1.1) (GenBank: AABL01000000)	98.4% sequence identity to <i>P. yoelii</i> subsp. <i>yoelii</i> , strain 17XNL(1.1) (GenBank: AABL01002684, AABL01000897) (Figure 1)
Functional Activity by PCR Amplification¹ CSP1 PCR amplicon analysis	~ 900 to 1100 base pair amplicon	~ 1100 base pair amplicon
Level of Parasitemia Pre-freeze (7 days post-infection) ² Post-freeze (7 days post-infection) ¹	Report results ≥ 1%	6.84% 4.45%
Viability (post-freeze; 7 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-593 CSP1 Sequence

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CAGGATATGG  AAAAAATAAA  AGTGTCCAAG  CCAAAGAAA  CTTAAACGAG  CTATGTTACA  ATGAAGAAAA  TGATAATAAA
TTGTATCACG  TCCTTAACTC  GAAGAATGGA  AAAATATACA  ATCGAAATAT  AGTCAACAGA  TTA2CTTGGCG  ATGCTCTCAA
CGGAAAACCA  GAAGAAAAAA  AAGATGATCC  CCAAAAAGAT  GGCAACAAAG  ATGATCTTCC  AAAAGAAGAA  AAAAAAGATG
ATCTTCCAAA  AGAAGAAAAA  AAAGATGATC  CCCC2AAAAGA  TCCTAAAAAA  GATGATCCAC  CAAAAGAGGC  TCAA2AATAAA
TTGAATCAAC  CAGTAGTGGC  AGATGAAAAT  GTAGATCAAG  GGCCAGGAGC  ACCACAAGGG  CCAGGAGCAC  CACAAGGGCC
AGGAGCACCA  CAAGGGCCAG  GAGCACCACA  GGGGCCAGGA  GCACCACAGG  GGCCAGGAGC  ACCACAAGGG  CCAGGAGCAC
CACAAGGACC  AGGAGCACCA  CAAGGGCCAG  GAGCACCACA  AGGGCCAGGA  GCACCACAAG  GGCCAGGAGC  ACCACAGGGG
CCAGGAGCAC  CACAAGGGCC  AGGAGCACCA  CAAGGACCAG  GAGCACCACA  GGGTCCAGGA  GCACCACAAG  GACCAGGAGC
ACCACAAGGA  CCAGGAGCAC  CACAAGGTCC  AGGAGCACCA  CAGGGTCCAG  GAGCACCACA  GGGTCCAGGA  GCACCACAAG
GACCAGGAGC  ACCACAAGAA  CCACCCCAAC  AACCACCCCA  ACAACCACCA  CAACAGCCAC  CACAACAGCC  ACCACAACAG
CCACCACAAC  AGCCACCACA  ACAACCACGC  CCACAGCCAG  ATGGTAATAA  CAACAATAAC  AATAATAATG  GTAATAATAA
TGAAGATTCT  TATGTCCCAA  GCGCGGAACA  AATACTAGAA  TTTGTTAAAC  AGATAAGTAG  TCAACTCACA  GAGGAATGGT
CTCAATGTAG  TGTAACCTGT  GGTCTGGTG  TAAGAGTTAG  AAAACGAAAA  AATGTAAACA  AGCAACCAGA  AAATTTGACC
TTAGAGGATA  TTGATACTGA  AATTTGTAAA  ATGGATAAAT  GTTCAAGTAT  ATTTAATATT  GTAAGCAATT  CATTAGGATT
TGTAATATTA  TT
    
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/Heather Couch/

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18 FEB 2020

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