

Plasmodium yoelii subsp. yoelii, Strain YM

Catalog No. MRA-755

Product Description: *Plasmodium yoelii* subsp. *yoelii* (*P. yoelii* subsp. *yoelii*), strain YM was cloned from the 17X strain. *P. yoelii* subsp. *yoelii*, strain 17X was isolated by I. Landau from wild-caught thicket rat (*Thamnomys rutilans*) no. 17X, at La Maboké Field Station in Central African Republic, April 1965.

Lot¹: 63856641

Manufacturing Date: 17NOV2015

TEST	SPECIFICATIONS	RESULTS
Genotypic Analysis Sequencing of Circumsporozoite Surface Protein 1 (CSP1) gene (~ 1260 base pairs) CSP1 PCR amplicon analysis ²	≥ 99% sequence identity to <i>P. yoelii</i> subsp. <i>yoelii</i> , strain YM (GenBank: LK934632.1) ~ 900-1100 base pair amplicon	100% sequence identity to <i>P. yoelii</i> subsp. <i>yoelii</i> , strain YM (GenBank: LK934632.1) (Figure 1) ~ 1100 base pair amplicon
Level of Parasitemia Pre-freeze ³ Post-freeze ⁴	Report results > 1%	> 20% > 5%
Viability (post-freeze)⁵	Growth in inoculated mice	Growth in inoculated mice

¹MRA-755 was produced by inoculation of MR-MRA-755 lot 58574145 into two ND4 Swiss Webster mice. Infection was allowed to progress for 7 days until parasitemia reached > 10%. Infected blood was collected by orbital bleeding and used to inoculate 12 ND4 Swiss Webster mice. Infection was allowed to progress until parasitemia reached > 10%. After 5 days, infected blood was collected by orbital bleeding.

²Primer sequences and conditions for PCR are available upon request; see, Mauduit, M., et al. "A Role for Immune Responses against Non-CS Components in the Cross-Species Protection Induced by Immunization with Irradiated Malaria Sporozoites." *PLoS One* 4 (2009): e7717. PubMed: 19890387.

³Pre-freeze parasitemia was determined after 5 days post infection by microscopic counts of Giemsa-stained blood smears.

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

⁵Viability was confirmed by examination of two ND4 Swiss Webster mice for parasitemia at 4 days post infection.

Figure 1: MRA-755 CSP1 Sequence

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AGAAGTGTAC CATTTTAGTT GTAGCGTCAC TTTTATTAGT TGATTCTCTA CTTCCAGGAT ATGGACAAAA TAAAAGTGTC
CAAGCCCAAA GAAACTTAAA CGAGCTATGT TACAATGAAG AAAATGATAA TAAATTGTAT CACGTCCTTA ACTCGAAGAA
TGGAAAAATA TACAATCGAA ATATAGTCAA CAGATTACTT GGCGATGCTC TCAACGGAAA ACCAGAAGAA AAAAAAGATG
ATCCCCCAA AGATGGCAAC AAAGATGATC TTCCAAAAGA AGAAAAAAA GATGATCTTC CAAAAGAAGA AAAAAAAGAT
GATCCCTCAA AAGATCCTAA AAAAGATGAT CCACCAAAA AGGTCAAAA TAAATTRAAT CAACCAGTAG TGGCAGATGA
AAATGTAGAT CAAGGGCCAG GAGCACCAYA AGGKCCAGGA GCACCACAAG GGCCAGGAGC ACCACAGGGG CCAGGAGCAC
CACAGGGGCC AGGAGCACCA CAAGGGCCAG GAGCACCACA AGGACCAGGA GCACCACAAG GGCCAGGAGC ACCACAAGGG
CCAGGAGCAC CACAAGGGCC AGGAGCACCA CAGGGGCCAG GAGCACCACA AGGGCCAGGA GCACCACAAG GACCAGGAGC
ACCACAGGGT CCAGGAGCAC CACAAGGACC AGGAGCACCA CAAGGACCAG GAGCACCACA AGGTCCAGGA GCACCACAGG
GTCCAGGAGC ACCACAGGGT CCAGGAGCAC CACAAGGACC AGGAGCACCA CAGGGGCCAG GAGCACCACA AGGACCAGGA
GCACCACAAG GACCAGGAGC ACCACAGGGG CCAGGAGCAC CACAAGGGCC AGGAGCACCA CAAGAACCAC CCCAACACC
ACCCCAACAA CCACCACAAC AGCCACCACA ACAGCCACCA CAACAGCCAC CACAACAGCC ACCACAACAA CCACGCCAC
AGCCAGATGG TAATAACAAC AATAACAATA ATAATGGTAA TAATAATGAA GATTCTTATG TCCAAGCGC GGAACAAATA
CTAGAATTTG TTAAACAGAT AAGTAGTCAA CTCACAGAGG AATGGTCTCA ATGTAGTGTA ACCTGTGGTT CTGGTGTAAG
AGTTAGAAAA CGAAAAATG TAAACAAGCA ACCAGAAAAT TTGACCTTAG AGGATATTGA TACTGAAATT TGTAATATGG
ATAAATGTTC AAGTATATTT AATATTGTAA GCAATTCATT AGGATTTGTA ATATTATTAG T
    
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Date: 20 JUL 2016

Signature:



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