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SUPPORTING INFECTIOUS DISEASE RESEARCH

Certificate of Analysis for MRA-911

Plasmid pXL-BACII-DHFR, for Transfection in *Plasmodium falciparum*

Catalog No. MRA-911

Product Description:

MRA-911, a *piggyBac* transposon vector for transformation of *P. falciparum*, was created by cloning the human dihydrofolate reductase (*hdhfr*) gene under the control of *Plasmodium calmodulin* and *histidine-rich protein-2* regulatory elements into the plasmid vector pXL-BacII. The glycerol stock was grown in Luria-Bertani broth with ampicillin (50 µg/mL) for 1 day at 37°C in an aerobic atmosphere and extracted using a QIAfilter Plasmid Maxi Kit (QIAGEN® 12262).

Lot: 70070910 **Manufacturing Date: 12AUG2025**

TEST	SPECIFICATIONS	RESULTS
Next-Generation DNA Sequencing	~ 6,200 base pairs	6,229 base pairs[1,2]
Genotypic Analysis Sequencing of human *dhfr* selectable marker	*hDHFR* sequence present	*hDHFR* sequence present
Antibiotic Resistance Ampicillin (encoded by beta-lactamase gene *bla*)	*bla* sequence present	*bla* sequence present
Concentration by PicoGreen® Measurement	≥ 2 µg/mL	0.5 µg in 50 µL/vial (10 µg/mL)
Amount per Vial	Report results	0.5 µg/vial
OD_{260}/OD_{280} Ratio	1.7 to 2.1	2.0

[1]*De novo* assembly of the NGS sequence was performed pre-vial.
[2]Comparison to the depositor's sequence indicates multiple SNPs in the sequence. However, these SNPs do not change the amino acid sequence of hDHFR protein.

/Sonia Bjorum Brower/
Sonia Bjorum Brower 24 MAR 2026
Technical Manager or designee, ATCC Federal Solutions

ATCC®, on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected by ATCC® to the tests and procedures specified and that the results described, along with any other data provided in this certificate, are true and accurate to the best of ATCC®'s knowledge.

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