

Vector CMVR Containing the Murine Anti-Middle East Respiratory Syndrome Coronavirus Spike Monoclonal Antibody G4 Light Chain Gene

Catalog No. NR-52031

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Product Description:

NR-52031 is an expression vector containing a 717 base pair (VL+CL) insert that encodes a murine anti-Middle East respiratory syndrome coronavirus (MERS-CoV) spike (S) monoclonal antibody G4 light chain gene. The vector contains regulatory elements CMV enhancer/promoter, CMV IE splicing acceptor and HTLV-1 R region/splicing donor. murine Ig light chain leader is provided as the targeting sequence. The kanamycin resistance gene, *aph*, provides transformant selection through kanamycin resistance in *Escherichia coli* (*E. coli*). The deposited plasmid was transformed into One Shot™ TOP10 *E. coli* (Invitrogen™ C404003), grown in Luria-Bertani broth with kanamycin (50 µg per mL) for 1 day at 37°C in an aerobic atmosphere, extracted using a Plasmid Plus Maxi Kit (QIAGEN® 12963) and vialled in TE buffer (10 mM Tris-HCl, 1 mM EDTA, pH 8.0).

Lot: 70047583

Manufacturing Date: 18OCT2021

TEST	SPECIFICATIONS	RESULTS
Next-Generation DNA Sequencing	~ 5100 base pairs	5126 base pairs ¹
Genotypic Analysis Anti-MERS-CoV spike monoclonal antibody G4 light chain gene (~ 720 base pairs)	≥ 99% sequence identity to depositor's sequence	99.6% sequence identity to depositor's sequence ²
Antibiotic Resistance Kanamycin (encoded by <i>aph</i>)	<i>aph</i> sequence present	<i>aph</i> sequence present
Concentration by Qubit Fluorometer®	≥ 2 µg/mL	0.96 µg in 80 µL/vial (12 µg/mL)
Amount per Vial	Report results	0.96 µg per vial
OD₂₆₀/OD₂₈₀ Ratio	1.7 to 2.1	1.96
Effective Bacterial Transformation Invitrogen™ One Shot™ TOP10 <i>E. coli</i>	≥ 50 colonies per ng	205 colonies per ng

¹The sequence was assembled pre-vial using the depositor's predicted sequence as the reference sequence. The complete plasmid sequence and map are provided on the BEI Resources webpage.

²Comparison to the depositor's sequence indicates three SNPs within the plasmid insert: c1446t and a1450c (M23L) and g1767a.

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