

Vector CMVR Containing the Murine Anti-Middle East Respiratory Syndrome Coronavirus Spike Monoclonal Antibody D12 Heavy Chain Gene

Catalog No. NR-52026

This reagent is the tangible property of the U.S. Government.

Product Description:

NR-52026 is an expression vector containing a 1383 base pair (VH+CH) insert that encodes a murine anti-Middle East respiratory syndrome coronavirus (MERS-CoV) spike (S) monoclonal antibody D12 heavy chain gene.^{1,2,3} The vector contains regulatory elements CMV enhancer/promoter, CMV IE splicing acceptor and HTLV-1 R region/splicing donor. murine Ig heavy 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: 70047573

Manufacturing Date: 18OCT2021

TEST	SPECIFICATIONS	RESULTS
Next-Generation DNA Sequencing	~ 5800 base pairs	5792 base pairs ¹
Genotypic Analysis Anti-MERS-CoV spike monoclonal antibody D12 heavy chain gene (~ 1380 base pairs)	≥ 99% sequence identity to depositor's sequence	100% sequence identity to depositor's sequence
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	1.3 µg in 100 µL per vial (13 µg/mL)
Amount per Vial	Report results	1.3 µg per vial
OD₂₆₀/OD₂₈₀ Ratio	1.7 to 2.1	2.0
Effective Bacterial Transformation Invitrogen™ One Shot™ TOP10 <i>E. coli</i>	≥ 50 colonies per ng	169 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.

/Sonia Bjorum Brower/

Sonia Bjorum Brower

02 NOV 2023

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® and the contributor 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.

ATCC® is a trademark of the American Type Culture Collection.

You are authorized to use this product for research use only. It is not intended for human use.

