

Vector paH Containing Human Respiratory Syncytial Virus (RSV), A2 Recombinant Fusion Glycoprotein dFP, Gene (Postfusion)

Catalog No. NR-55426

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Product Description:

NR-55426 is an expression vector encoding human respiratory syncytial virus (RSV), A2 recombinant postfusion F glycoprotein variant. The protein construct consists of synthesized, mammalian codon-optimized RSV F, [residues 1 to 513 with fusion peptide residues 137 to 146 deleted (dFP)] with a C-terminal human rhinovirus (HRV) 3C site, octahistidine tag, and Strep-tag® II.¹ The RSV F variant is derived from A2 strain (GenPept: [P03420](#)) with three naturally occurring substitutions (P102A, I379V and M447V) for enhanced protein expression.^{1,2} NR-55426 contains the beta-lactamase gene, *bla*, to provide transformant selection through ampicillin resistance in *Escherichia coli* (*E. coli*). The deposited plasmid was transformed into One Shot™ TOP10 *Escherichia coli* (Invitrogen™ C404003), grown in LB broth with ampicillin (100 µg/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: 70059263

Manufacturing Date: 08MAR2023

TEST	SPECIFICATIONS	RESULTS
Next-Generation DNA Sequencing (pre-vial)	~ 6140 base pairs	6045 base pairs
Genotypic Analysis Sequencing of F glycoprotein dFP insert (~ 1600 base pairs)	≥ 99% sequence identity to depositor's sequence	100% sequence identity to depositor's sequence
Antibiotic Resistance Ampicillin (encoded by beta-lactamase gene <i>bla</i>)	<i>bla</i> sequence present	<i>bla</i> sequence present
Concentration by Qubit Fluorometer®	≥ 2 µg/mL	4 µg in 100 µL/vial (40 µg/mL)
Amount per Vial	Report results	4 µg/vial
OD₂₆₀/OD₂₈₀ Ratio	1.7 to 2.1	1.9
Effective Bacterial Transformation Invitrogen™ One Shot™ TOP10 <i>E. coli</i>	≥ 50 colonies/ng	270 colonies/ng

¹The sequence was assembled pre-vial using the depositor's predicted sequence as the reference sequence. *De novo* assembly was performed.

/Sonia Bjorum Brower/
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28 NOV 2023

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