

**Vector pCR3.1 Containing the SARS-Related Coronavirus 2, USA-WA1/2020 Spike Glycoprotein Gene**

**Catalog No. NR-58670**

**For research use only. Not for use in humans.**

**Contributor:**

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**Manufacturer:**

BEI Resources

**Product Description:**

The Spike Glycoprotein (S) gene sequence matching the severe acute respiratory syndrome-related coronavirus 2 (SARS-CoV-2), isolate USA-WA1/2020 was codon optimized and cloned into the mammalian expression vector pCR3.1.<sup>1</sup> The translated amino acid sequence is identical to SARS-CoV-2, isolate USA-WA1/2020 S protein (GenPept: [QHO60594](#)). The plasmid is approximately 8780 base pairs and contains an ampicillin resistance marker for transformant selection. The complete plasmid sequence is provided on the BEI Resources webpage. The plasmid was produced in *E. coli* and extracted.

**Material Provided:**

Each vial contains plasmid DNA in TE buffer (10 mM Tris-HCl, 1 mM EDTA, pH 8.0). The DNA concentration and volume provided are shown on the Certificate of Analysis. The vial should be centrifuged prior to opening. Note: The contents of the vial should be used to replicate the plasmid in *E. coli* prior to expression studies.

**Packaging/Storage:**

NR-58670 was packaged aseptically in cryovials. The product is provided frozen on dry ice and should be stored at -20°C or colder immediately upon arrival. Freeze-thaw cycles should be minimized.

**Citation:**

Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: Vector pCR3.1 Containing the SARS-Related Coronavirus 2, USA-WA1/2020 Spike Glycoprotein Gene, NR-58670.”

**Biosafety Level: 1**

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. [Biosafety in Microbiological and Biomedical Laboratories \(BMBL\)](#). 6th ed. Washington, DC: U.S. Government Printing Office, 2020.

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**References:**

1. Rice, C. M., Personal Communication.
2. Ricardo-Lax, I., et al. “Replication and Single-Cycle Delivery of SARS-CoV-2 Replicons.” [Science](#) 374 (2021): 1099-1106. PubMed: 34648371.

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