pSMART® BAC V2.0 Vector Containing the SARS-Related Coronavirus 2, Wuhan-Hu-1 Non-Infectious Replicon

Catalog No. NR-54972

For research use only. Not for use in humans.

Contributor:
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Manufacturer:
BEI Resources

Product Description:
The vector for the non-infectious replicon from severe acute respiratory syndrome-related coronavirus 2 (SARS-CoV-2), Wuhan-Hu-1 (GenBank: NC_045512) was designed by cloning a T7 promoter upstream of the SARS-CoV-2 insert and a poly A/HDV ribozyme and T7 terminator cassette downstream and subcloned into the pSMART® BAC V2.0 cloning vector (GenBank: EU101022). The spike (S) gene was replaced by a luciferase (Luc2) and enhanced green fluorescent protein (eGFP) fusion construct. The Luc2 gene is a synthetic firefly luciferase gene that has been codon optimized for mammalian expression and has had cryptic transcription factor binding sites removed. The envelope (E) and membrane (M) genes were replaced with a neomycin resistance gene, aminoglycoside transferase. NR-54972 is used to express a SARS-CoV-2 replicon that is defective in producing progeny virions and can be handled with safety under biosafety level 2 conditions. Appropriate biosafety controls should be employed during replicon production.

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-54972 was packaged aseptically in plastic 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: pSMART® BAC V2.0 Vector Containing the SARS-Related Coronavirus 2, Wuhan-Hu-1 Non-Infectious Replicon, NR-54972.”

Biosafety Level: 1

Disclaimers:
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NR-54972 is claimed in U.S. Provisional Patent Application number 63/083,852 as well as U.S. Patent number 8,008,006 and European Patent number 1341808 and the continuations, continuations-in-part, re-issues and foreign counterparts thereof.

References:

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