Vector pαH Containing the SARS Coronavirus, Recombinant Spike Ectodomain Gene

Catalog No. NR-54975
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For research use only. Not for use in humans.

Contributor:
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Manufacturer:
BEI Resources

Product Description:
NR-54975 is an expression vector containing the SARS coronavirus, recombinant spike ectodomain gene insert (codon optimized) encoding S1 ectodomain residues 1-1190 (GenPept: AAP41037.1) linked to C-terminal T4 fibritin trimerization domain (foldon), an HRV3C cleavage site, octa His-tag and Strep-tag™II. Recombinant S ectodomain trimer is stabilized in the prefusion conformation by two proline substitutions (K968P and V969P).1,2 NR-54975 contains the beta-lactamase gene, bla, to provide transformant selection through ampicillin resistance in Escherichia coli (E. coli). NR-54975 is also referred to as VRC7575.3 NR-54975 is claimed in U.S. Provisional Patent Application number EP 3532095 and the continuations, continuations-in-part, re-issues and foreign counterparts thereof. NR-54975 cannot be transferred to for-profit entities.

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 and extracted.

The S glycoprotein mediates viral binding to the host angiotensin-converting enzyme 2 (ACE2). This protein forms a trimer, and when bound to a host receptor allows fusion of the viral and cellular membranes. The S protein is a target for neutralizing antibodies.3,4

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NR-54975 was packaged aseptically in screw-capped 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.

Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: Vector pαH Containing the SARS Coronavirus, Recombinant S Ectodomain Gene, NR-54975.”

Biosafety Level: 1

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References:

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