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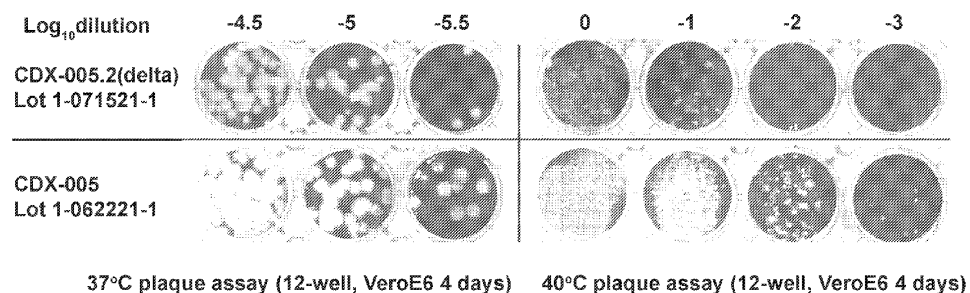
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(54) Title: DEOPTIMIZED SARS-COV-2 VARIANTS AND METHODS AND USES THEREOF

FIG. 12



(57) Abstract: Described herein are modified SARS-CoV-2 variants. These viruses have been recoded, for example, codon deoptimized or codon pair bias deoptimized and are useful for reducing the likelihood or severity of a SARS-CoV-2 variant infection, preventing a SARS-CoV-2 variant infection, eliciting and immune response, or treating a SARS-CoV-2 variant infection.

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