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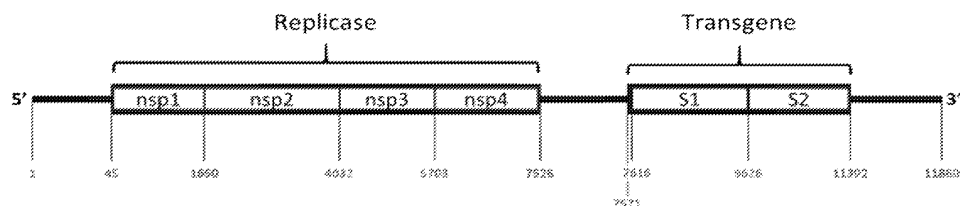


FIG. 1A

(57) Abstract: Provided herein are RNA molecules encoding viral replication proteins and antigenic proteins or fragments thereof. Also provided herein are compositions that include RNA molecules encoding viral replication proteins and antigenic proteins or fragments thereof, and lipids. RNA molecules and compositions including them are useful for inducing immune responses.

[Continued on next page]

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