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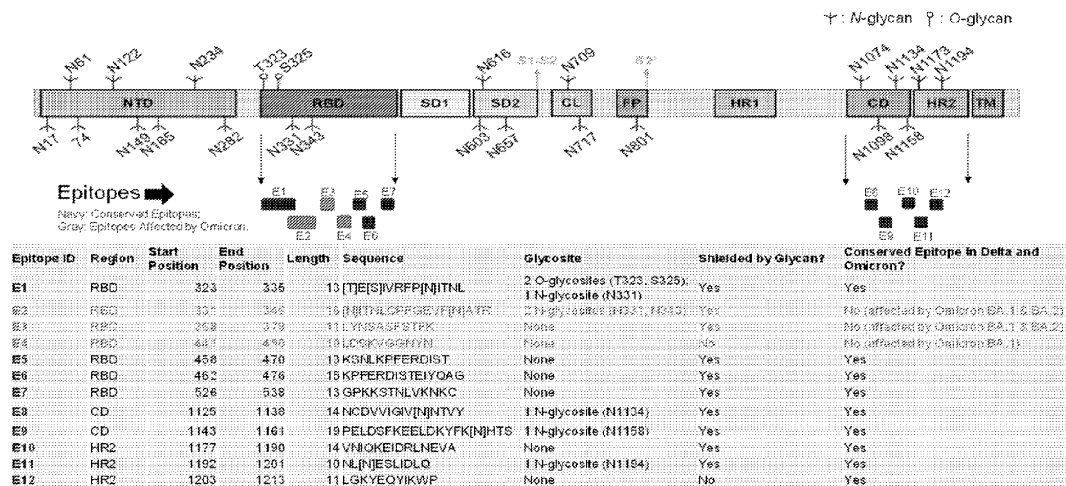


Fig. 1

(57) Abstract: The present invention relates to the mRNA vaccine of coronavirus spike protein with deletion of glycosites in the receptor binding domain (RBD), the subunit 1 (S1) domain, or the subunit 2 (S2) domain, or a combination thereof. The vaccine elicits broadly protective immune responses coronavirus and variants thereof.

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