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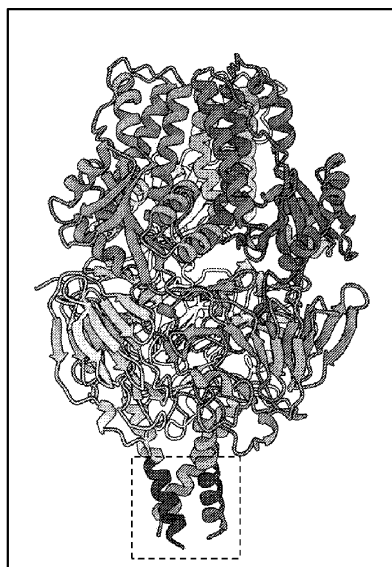
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(54) Title: RESPIRATORY SYNCYTIAL VIRUS F PROTEINS AND NANOSTRUCTURES AND USES THEREOF

A FIG. 8



(57) Abstract: Provided herein are recombinant polypeptides comprising an engineered ectodomain of a Respiratory Syncytial Virus (RSV) fusion (F) protein, wherein the ectodomain comprises an engineered C-terminal alpha-helical segment and/or amino acid substitutions that stabilize the F protein in a prefusion conformation. The disclosure also provides a two-component protein nanostructure comprising first trimeric component and second pentameric component. Provided herein are a composition for use in vaccinating, generating an immune response, or treating or preventing RSV disease.

WO 2025/059521 A1