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(54) Title: POLYPEPTIDE FRAGMENTS, IMMUNOGENIC COMPOSITION AGAINST SARS-CoV-2, AND IMPLEMENTATIONS THEREOF

(57) Abstract: The present disclosure discloses the polypeptide fragment having an amino acid sequence with at least 95% identity to the amino acid sequence selected from the group consisting of SEQ ID NO: 2, SEQ ID NO: 4, and SEQ ID NO: 6. The present disclosure also discloses nucleic acid fragment encoding the polypeptide fragment as described herein. Moreover, the present disclosure also discloses recombinant construct, recombinant vector and recombinant host cells. Also disclosed herein is an immunogenic composition comprising the polypeptide fragment as described herein, and a method for preparing the said immunogenic composition. The immunogenic composition is in form of vaccine. The polypeptide fragment and/or immunogenic composition is capable of eliciting protection against severe acute respiratory syndrome coronavirus 2. A kit comprising the polypeptide, or the immunogenic composition as described herein is also disclosed.



WO 2022/003719 A3