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(54) Title: SEVERE ACUTE RESPIRATORY SYNDROME DNA VACCINE COMPOSITIONS AND METHODS OF USE

(57) Abstract: The present invention is directed to raising a detectable immune response in a vertebrate by administering *in vivo*, into a tissue of the vertebrate, at least one polynucleotide comprising one or more regions of nucleic acid encoding a SARS-CoV protein or a fragment, a variant, or a derivative thereof. The present invention is further directed to raising a detectable immune response in a vertebrate by administering, *in vivo*, into a tissue of the vertebrate, at least one SARS-CoV protein or a fragment, a variant, or derivative thereof. The SARS-CoV protein can be, for example, in purified form. The polynucleotide is incorporated into the cells of the vertebrate *in vivo*, and an immunologically effective amount of an immunogenic epitope of a SARS-CoV polypeptide, fragment, variant, or derivative thereof is produced *in vivo*. The SARS-CoV protein is also administered in an immunologically effective amount.

WO 2005/021707 A2