

1. CN112220919 - NANO CORONAVIRUS RECOMBINANT VACCINE TAKING GRAPHENE OXIDE AS CARRIER

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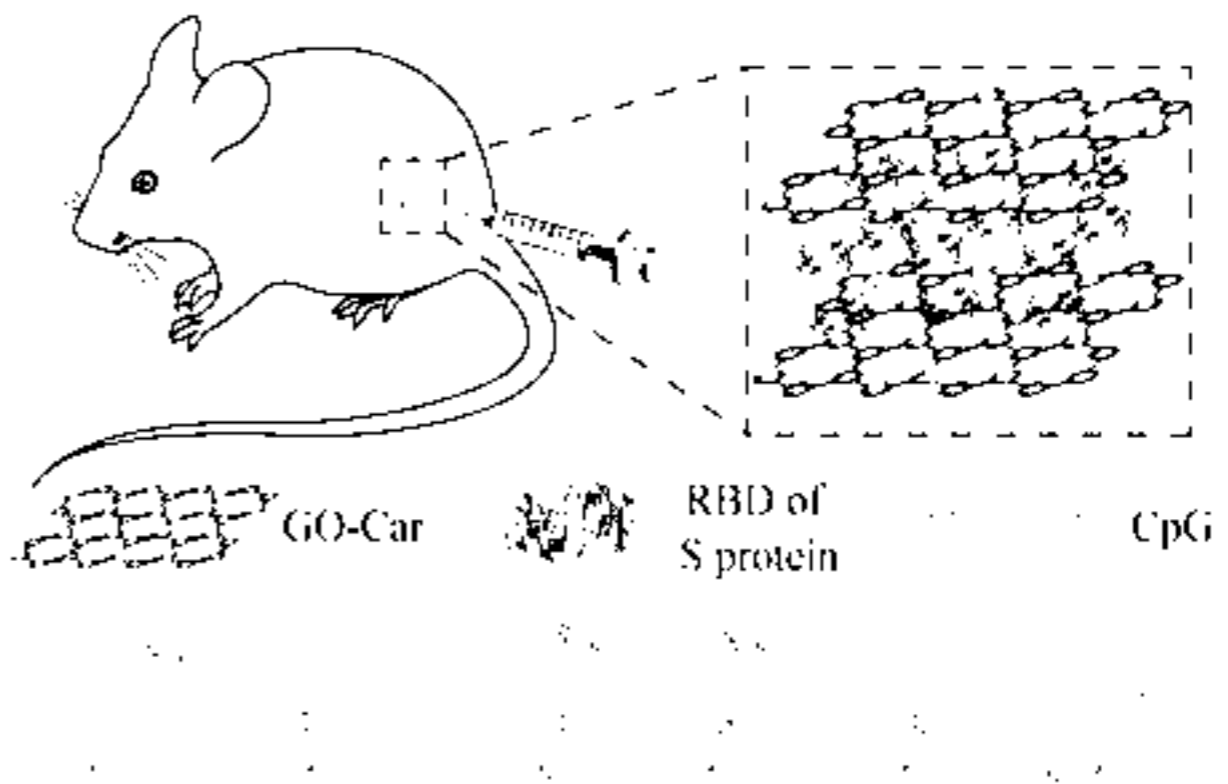
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Title

[EN] Nano coronavirus recombinant vaccine taking graphene oxide as carrier

[ZH] 以氧化石墨烯为载体的纳米冠状病毒重组疫苗



Abstract

[EN] The invention belongs to the field of nano materials and biological medicines, and relates to a vaccine, in particular to development of a 2019-nCoV coronavirus nuclear recombinant nano vaccine. The invention also comprises a preparation method of the vaccine and application of the vaccine in animal experiments. The novel coronavirus vaccine contains graphene oxide, carnosine, CpG and novel coronavirus RBD; The carnosine, the CpG and novel coronavirus RBD are combined on a framework of the graphene oxide; the coding sequence of the CpG is as shown in SEQ ID NO 1; and the novel coronavirus RBD refers to that a novel coronavirus protein receptor binding region can generate a high-titer specific antibody aiming at the RBD in a mouse body, and strong support is provided for prevention and treatment of the novel coronavirus.

[ZH] 本发明属于纳米材料和生物医药领域，涉及一种疫苗，具体而言，涉及2019-nCoV冠状病毒核重组纳米疫苗的开发。本发明还包括该疫苗的制备方法以及在动物试验中的应用。所述的新冠疫苗含有氧化石墨烯、肌肽、CpG、新冠病毒RBD；在氧化石墨烯的骨架上结合肌肽、CpG和新冠病毒RBD；所述的CpG的编码序列如SEQ ID NO 1所示；所述的新冠病毒RBD是指新型冠状病毒蛋白受体结合区域可以在小鼠体内产生高效价的针对RBD的特异性抗体，为新型冠状病毒的防治提供了强有力的支持。