

Provided herein are recombinant modified vaccinia virus Ankara (MVA) strains as improved vaccines against infection with Respiratory Syncytial Virus (RSV virus) and to related products, methods and uses. Specifically, provided herein are genetically engineered recombinant MVA vectors comprising at least one nucleotide sequence encoding an antigenic determinant of an RSV membrane glycoprotein and at least one nucleotide sequence encoding an antigenic determinant of an RSV nucleocapsid protein. Also provided herein are products, methods and uses: thereof, e.g., suitable to affect an immune response in a subject, or suitable to diagnose an RSV infection, as well as to determine whether a subject is at risk of recurrent RSV infection.