ABSTRACT

RECOMBINANT VIRAL-BASED MALARIA VACCINES

The present invention relates to novel vaccines against malaria infections, based on recombinant viral vectors, such as alphaviruses, adenoviruses or vaccinia viruses. The recombinant viral-based vaccines can be applied for immunization against different Plasmodium infections, such as infections by P.falciparum or P.yoelii. Novel codon-optimized circumsporozoite (CS) genes are disclosed. Preferably, replication-defective adenoviruses are used, derived of serotypes that encounter low titers of neutralizing antibodies. The invention therefore also relates to the use of different adenoviral serotypes that are administered to elicit a strong immune response, either in single vaccination setups, or in prime-boost set-ups in which compositions based on different serotypes can be applied.