

ABSTRACT

The present application relates to the fields of gene therapy and molecular biology. More specifically, the present invention relates to an isolated modified capsid protein VP1 from adeno-associated virus serotype 9 (AAV9) comprising one or more amino acid substitutions compared to the wild-type AAV9 capsid protein VP1, which substitutions increase the efficiency of production (assembly) of the vector based on recombinant adeno-associated virus serotype 9 (rAAV9), to a capsid and a vector based on the above VP1, as well as to uses thereof.