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(54) Title: NEW STAPHYLOKINASE DERIVATIVES

(57) Abstract

A method for producing the derivatives of the invention by preparing a DNA fragment comprising at least the part of the coding sequence of staphylokinase that provides for its biological activity; performing *in vitro* site-directed mutagenesis on the DNA fragment to replace one or more codons for wild-type amino acids by a codon for another amino acid; cloning the mutated DNA fragment in a suitable vector; transforming or transfecting a suitable host cell with the vector; and culturing the host cell under conditions suitable for expressing the DNA fragment. Preferably the DNA fragment is a 453 bp EcoRI-HindIII fragment of the plasmid pMEX602SakB, the *in vitro* site-directed mutagenesis is performed by an oligonucleotide-directed mutagenesis system using the plasmid pMa/c and the repair deficient *E. coli* strain WK6MutS, and the mutated DNA fragment is expressed *E. coli* strain WK6. The invention also relates to pharmaceutical compositions comprising at least one of the staphylokinase derivatives according to the invention together with a suitable excipient, for treatment of arterial thrombosis.