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(54) Title: ANTIGENIC POLYPEPTIDES

(57) **Abrégé/Abstract:**

The invention relates to a method for the identification of antigenic polypeptides, typically opsonic antigens, expressed by pathogenic microbes; vaccines comprising said antigens; and therapeutic antibodies directed to said antigenic polypeptides.



ABSTRACT

The invention relates to a method for the identification of antigenic polypeptides, typically opsonic antigens, expressed by pathogenic microbes; vaccines comprising said antigens; and therapeutic antibodies directed to said antigenic polypeptides.

CLAIMS

1. A *Staphylococcal* vaccine comprising a carrier and a polypeptide encoded by an isolated nucleic acid molecule comprising a DNA sequence selected from the group consisting of:
 - (i) the DNA sequence as represented in SEQ ID NO: 57; and
 - (ii) a DNA sequence that anneals under stringent hybridization conditions to a complement of the sequence presented in SEQ ID NO: 57, wherein the stringent hybridization conditions comprise hybridization of a nucleic acid sequence to a complement of the sequence presented in SEQ ID NO: 57 followed by washing with 0.1 x standard sodium citrate (SSC) and 0.1% sodium dodecyl sulfate (SDS) at 60°C.
2. The *Staphylococcal* vaccine as claimed in claim 1, wherein the polypeptide has the sequence as presented in SEQ ID NO: 244.
3. The *Staphylococcal* vaccine as claimed in claim 1 or 2, wherein the vaccine further comprises an adjuvant.
4. The use of the *Staphylococcal* vaccine as claimed in claim 1 or 2 in the preparation of a medicament for immunizing an animal against pathogenic *Staphylococci*.
5. The use of the *Staphylococcal* vaccine as claimed in claim 4 wherein the animal is a human.
6. The use of the *Staphylococcal* vaccine as claimed in claim 4 or 5 wherein the medicament generates an antibody which binds to a polypeptide encoded by an isolated nucleic acid molecule comprising a DNA sequence selected from the group consisting of:
 - (i) the DNA sequence as represented in SEQ ID NO: 57; and

- (ii) a DNA sequence that anneals under stringent hybridization conditions to a complement of the sequence presented in SEQ ID NO: 57, wherein the stringent hybridization conditions comprise hybridization of a nucleic acid sequence to a complement of the sequence presented in SEQ ID NO: 57 followed by washing with 0.1 x standard sodium citrate (SSC) and 0.1% sodium dodecyl sulfate (SDS) at 60°C.
- 7. The use of the *Staphylococcal* vaccine as claimed in claim 4 or 5 wherein the pathogenic *Staphylococci* is *Staphylococcus aureus*.
 - 8. The use of the *Staphylococcal* vaccine as claimed in claim 4 or 5 for immunization against Staphylococcal infection.
 - 9. The use of a polypeptide encoded by an isolated nucleic acid molecule comprising a DNA sequence selected from the group consisting of:
 - (i) the DNA sequence as represented in SEQ ID NO: 57; and
 - (ii) a DNA sequence that anneals under stringent hybridization conditions to a complement of the sequence presented in SEQ ID NO: 57, wherein the stringent hybridization conditions comprise hybridization of a nucleic acid sequence to a complement of the sequence presented in SEQ ID NO: 57 followed by washing with 0.1 x standard sodium citrate (SSC) and 0.1% sodium dodecyl sulfate (SDS) at 60°C; in the manufacture of a vaccine for immunization against Staphylococcal infection.