

CLAIMS

1. A polypeptide comprising an amino acid sequence according to SEQ ID No. 1 or a fragment or derivative thereof.
2. The polypeptide according to claim 1, wherein the fragment comprises an amino acid sequence according to SEQ ID No. 3.
3. The polypeptide according to claim 1 or 2, wherein the derivative has a deletion, addition, insertion and/or substitution in the amino acid sequence according to SEQ ID No. 1, 3, 5, 6 and/or 7.
4. The polypeptide according to claims 1 to 3, wherein the polypeptide is fused at the N- or C-terminus to a peptide stretch having membrane or LPS disrupting activity.
5. The polypeptide according to any one of the preceding claims comprising additionally a tag, preferably a His6-tag.
6. The polypeptide according to any one of the preceding claims, wherein the polypeptide has endolysin activity.
7. An isolated nucleic acid molecule encoding a polypeptide according to any one of claims 1 to 6.
8. A vector comprising the nucleic acid molecule according to claim 7.
9. A host cell comprising the nucleic acid molecule according to claim 7 or the vector according to claim 8.
10. The polypeptide according to any one of claims 1 to 6 for use in a method of treating the human or animal body by surgery or therapy and diagnostic methods practised on the human or animal body.
11. Use of an polypeptide according to any one of claims 1 to 6 as an antimicrobial in food, feed or in cosmetics, or as a disinfecting agent.
12. The polypeptide according to any one of claims 1 to 6 for use in a method for treatment or prevention of Gram-negative bacterial infections.
13. Use of the polypeptide according to any one of claims 1 to 6 for the treatment or prevention of Gram-negative bacterial contamination of foodstuff, of food processing equipment, of food processing plants, of surfaces coming into contact with foodstuff, of feed, of feed processing equipment, of feed processing plants, of surfaces coming into contact with feed, of medical devices, of surfaces in hospitals and doctor's offices.

14. Pharmaceutical composition comprising the polypeptide according to any one of claims 1 to 6 and a pharmaceutically acceptable diluent or excipient.