This non–pathogenic bacterium is Gram–negative and was isolated from groundwater.

More particularly, bacterium LMB64 is rod–shaped with a length of roughly 2.3 µm (±0.3) and a width of roughly 1.0 µm (±0.1). A characteristic feature of this bacterium is the presence of a polar flagellum.

The gene encoding 16S rRNA has been almost completely sequenced (1487 bp, corresponding to sequence SEQ ID No. 1). Bacterium LMB64 has a circular plasmid of 10948 bp. This plasmid was completely sequenced, and the sequence is represented in sequence SEQ ID No. 2.

According to another embodiment, a bacterium from which the secretome of the invention is derived contains at least one plasmid comprising sequence SEQ ID No. 2, or any sequence having at least 80% identity with sequence SEQ ID No. 2, advantageously at least 85%, at least 90%, at least 95%, even at least 97% and more preferentially still at least 98% identity with sequence SEQ ID No. 2.

In addition, a bacterium from which the secretome is derived is a non–pathogenic Gram–negative bacterium belonging to the class Betaproteobacteria, subfamily Neisseriaceae, said bacterium containing a 16S rRNA comprising sequence SEQ ID No. 1, or any sequence having at least 80%, even at least 90%, at least 95%, at least 97% identity with sequence SEQ ID No. 1 and said bacterium containing at least one plasmid comprising sequence SEQ ID No. 2, or any sequence having at least 80% identity with sequence SEQ ID No. 2, advantageously at least 85%, at least 90%, at least 95%, even at least 97% and more preferentially still at least 98% identity with sequence SEQ ID No. 2.

By way of example, such a bacterium is represented by strain LMB64, which was deposited in the name of the Applicant in the *Collection Nationale de Cultures de Microorganismes* (CNCM), Institut Pasteur, Paris, on 8 April 2010 under number I–4920.

Having this genotypic information, combined with the characteristics concerning growth in sulphur–free medium and the non–filamentous nature of this bacterium, a person skilled in the art would have no difficulty in finding/identifying another bacterium allowing a secretome of the invention to be obtained. Such an identification of another bacterium, of course slightly genotypically different but possessing all the

http://www.ncbi.nlm.nih.gov/gorf/b12.html, may be used with the default parameters (in particular for the parameters “open gap penalty”: 5, and “extension gap penalty”: 2; with the selected matrix being for example the “BLOSUM 62” matrix proposed by the program). The percentage identity between the two sequences to be compared is calculated directly by the program. It is also possible to use other programs such as the “ALIGN” or “Megalign” software (DNASTAR).

A bacterium of the invention includes bacterium LMB64 which contains at least one plasmid comprising sequence SEQ ID No. 2, or any sequence having at least 80%, preferably 85%, 90%, 95% and 98% identity with said sequence SEQ ID No. 2. Other features of said bacterium LMB64 will be detailed below in the examples.

Moreover, bacterium LMB64 was deposited in the name of the Applicant in the *Collection Nationale de Cultures de Microorganismes* (CNCM), Institut Pasteur, Paris, on 8 April 2010 under number I–4920.

According to another embodiment, the present invention also relates to a bacterial secretome for use in the treatment of skin lesions according to the second embodiment, characterized in that the basic buffer is selected from Tris buffer, arginine buffer and mixtures thereof.

In another embodiment, the invention relates to a bacterial secretome for use in the treatment of skin lesions according to one of the preceding embodiments, characterized in that step b) of liquid/solid separation is followed by a step b’) of clarification of the liquid phase or of the buffered liquid phase by filtration before step c).

In another embodiment, the invention relates to a bacterial secretome for use in the treatment of skin lesions according to the preceding embodiment, characterized in that filtration is carried out with a 0.2 µm cut–off.

According to another embodiment, the invention also relates to a bacterial secretome for use in the treatment of skin lesions according to one of the preceding

CLAIMS

1. Use of a bacterial secretome of a non–pathogenic Gram–negative bacterium belonging to the class Betaproteobacteria, subfamily Neisseriaceae, containing a 16S rRNA comprising sequence SEQ ID No. 1, or any sequence having at least 90% identity with sequence SEQ ID No. 1, wherein the bacterium is the bacterium deposited with the CNCM on 8 April 2010 under number I–4920, in the manufacture of a medicament, for the treatment of skin lesions,
said secretome being obtained by a process comprising the steps of:
– a) culturing said bacterium in a culture medium and under conditions suitable for its growth,
– b) liquid/solid separation and recovery of the liquid phase,
– c) obtaining said secretome comprising the biomolecules secreted by said bacterium in the liquid phase;
characterized in that a basic buffer is added to the liquid phase obtained in said step b) and that the buffered liquid phase obtained is optionally left in contact for 1 to 7 h, preferably at a temperature between 1 and 6°C, and
characterized in that the said basic buffer is selected from Tris buffer, arginine buffer and mixtures thereof.

2. The use according to claim 1, characterized in that step b) of liquid/solid separation is followed by a step b') of clarification of the liquid phase or of the buffered liquid phase by filtration before step c).

3. The use according to claim 2, characterized in that filtration is performed with a 0.2 µm cut–off.

4. The use according to one of claims 1 to 3, characterized in that said biomolecules consist of the peptides, proteins and secondary metabolites secreted by said bacterium.

5. The use according to one of claims 1 to 4, characterized in that the bacterium contains at least one plasmid comprising sequence SEQ ID No. 2, or any sequence having at least 90% identity with sequence SEQ ID No. 2.

6. The use according to one of claims 1 to 5, characterized in that the skin lesions are selected from the group consisting of abrasions, burns, sunburns, scratches, cuts, scrapes, stitches.

7. The use according to one of claims 1 to 6, characterized in that the skin lesions follow trauma, surgery, a dermatological procedure, or a cosmetic medicine procedure.

8. The use according to one of claims 1 to 7, characterized in that the treatment of skin lesions consists in improving healing and skin repair.

9. The use according to one of claims 1 to 8, characterized in that it is combined with a copper salt and/or a zinc salt.

10. Use of a dermatological composition containing a bacterial secretome as defined in one of claims 1 to 5and a dermatological excipient suitable for topical application, in the manufacture of a medicament, for the treatment of skin lesions.

11. Use of a dermatological composition containing a bacterial secretome as defined in one of claims 1 to 5, a copper salt and/or a zinc salt and a suitable dermatological excipient, in the manufacture of a medicament, for the treatment of skin lesions.

12. Use of a dermatological composition as defined in claim 11, in the manufacture of a medicament, for the treatment of skin lesions.