Claims

1. A method of selecting a probiotic strain for treating and/or preventing diarrhea, said method comprising the steps of:
   - measuring the effect of at least one test strain on the expression of the CFTR (Cystic Fibrosis Transmembrane Conductance Regulator) protein, and
   - selecting at least one strain that induces a decrease in the expression of the CFTR protein.

2. The method of selection as claimed in claim 1, said method further comprising the steps of:
   - measuring the effect of at least one test strain on expression of the NHE3 (Sodium Hydrogen Exchanger 3) protein, and
   - selecting at least one strain that induces an increase in expression of the NHE3 protein.

3. The method of selection as claimed in claim 1 or claim 2, characterized in that the test strain is a yeast strain or a bacterial strain.

4. The method of selection as claimed in claim 3, characterized in that the bacterial strain is a strain of *Bacillus*.

5. The method of selection as claimed in claim 4, wherein the strain is a strain of *Bacillus subtilis*.

6. The method of selection as claimed in any one of claims 1 to 5, characterized in that the expression of the CFTR protein and/or of the NHE3 protein is measured by electrophoresis, Western blot, immunoassay, immunohistochemistry, immunocytochemistry, mass spectrometry, RT-PCR or Northern blot.

7. Use of the strain of *Bacillus subtilis* CU1 deposited at the CNCM (National Collection of Cultures of Microorganisms) on October 25, 2001 under number I-2475.

8. The use as claimed in claim 7, characterized in that the diarrhea is acute diarrhea or chronic diarrhea.

9. The use as claimed in claim 7 or claim 8, characterized in that the diarrhea is diarrhea of infectious origin or diarrhea of noninfectious origin.

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