Abstract

Lactiplantibacillus plantarum JN-7, a bacterial powder, a preparation method, a probiotic composition and the use thereof. According to the present application, a new strain of *Lactiplantibacillus plantarum* named *Lactiplantibacillus plantarum* JN-7 with the deposit number of CGMCC No. 30605 is obtained by means of screening. By means of basic characteristic analysis (growth curve, acid resistance, bile salt resistance, and gastrointestinal fluid resistance), safety evaluation (antibiotic sensitivity, hemolytic capacity, toxigenic capacity, and cytotoxicity), adhesion evaluation, anti-inflammatory effect evaluation, production performance evaluation (fermentation yield and lyophilization yield), and stability tests (an accelerated storage stability test) of this strain, it is found that *Lactiplantibacillus plantarum* JN-7 is a safe strain with an excellent production performance, high stability and an anti-inflammatory efficacy. The bacterial powder produced therefrom can remain stable and active for a long time.

[FIG. 6A]