

Isolation and Identification of Intestinal Bacteria of C57BL/6 Mice to Assess Biological Activities of Plant Resources

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Much of bacteria inhabit intestine and affect health. To elucidate the composition of intestinal bacteria and biological activities of plant materials on the bacteria, bacterial strains are need to be isolated and identified. In previous study, we isolated 41 fecal bacteria of BALB/c mice and the strains were identified as 11 species including *Lactobacillus murinus* and not classified bacterium. To expand the bacterial resources, we tried to isolate more bacteria from C57BL/6 mice. Fresh feces was suspended and serially diluted in distilled water. The aliquots were inoculated on GAM agar plate and incubated anaerobically at 37°C for 48 h. Each of colony formed was picked up and incubated again on GAM agar plate for stock and sampling. The bacteria gained were analyzed and identified by 16S rRNA gene. The bacterial strain were listed up. Major strain was *Lactobacillus murinus* which was observed as an abundant strain of BALB/c mice. The resources could be used for experiments of biological activities of plant materials and microbial composition of intestinal contents of experimental animals.

Key words: C57BL/6, Fecal bacteria, 16S rRNA gene, Plant materials

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