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**Isolation and cultural characterization of probiotic
Lactobacillus sakei BK19**

Byung-Gyoo Yang and Moon-Soo Heo*

Faculty of Applied Marine Science, Cheju National University

The purpose of the present study was to isolate the candidate of probiotics and investigate their cultural characterization to give a information for industrial application. Seven tested LAB strains were able to inhibit the fish pathogenic bacteria including *Vibrio anguillarum*, *Edwardsiella tarda* and *Streptococcus sp.*. Of the probiotic candidates, BK19 strain which from fermented pollack viscera had the largest inhibitory spectrum. This particular probiotic bacteria was identified as *Lactobacillus sakei* BK19. Moreover, *L. sakei* BK19 showed significantly high resistance to low pH also it has a high antibiotic tolerance. In the study of optimal culture condition, *L. sakei* BK19 was well grown under sucrose, maltose, and saccharose but lactose, mannitol was not be used as a carbon source for their growth and fermentation. also *L. sakei* BK19 was able to grow at 15 to 45? culture temperature and 0 to 7% of NaCl concentration.