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Physiological and Functional Characterization of a Biosurfactant
Produced by *Bacillus subtilis* TBM 3101(3)-9

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A biosurfactant-producing strain, TBM 3101(3)-9 was isolated from the soil sample of Taebaek Mountain through an antifungal test and emulsification assessment. The surface tension of *B. subtilis* TBM 3101(3)-9 sharply decreased to the minimum 29 mN/m at 18 h growth. Of note, its emulsification was highest stabilized when tributyrin was utilized as a substrate, indicating that the biosurfactant produced by the isolate was significantly similar to a synthetic surfactant, tween 20. In addition, the biosurfactant showed a high emulsification activity when soybean oil, crude oil and tetradecane were used as a substrate. Thus, these studies could contribute to the detection and development of biosurfactant beneficial to the environment and humans.

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Charaterization of Lipopeptide, a Biosurfactant Produced by
Micrococcus sp. GBM 3309(3)-11

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Biosurfactant-producing *Micrococcus* sp. GBM 3309(3)-11 was isolated from the soil sample of Kyebang Mountain by the antifungal and emulsification assessment. The surface tension of the isolate dramatically decreased to the minimum 31.98 mN/m after a 42 h culture. The emulsifying stability reached to a highest degree when tributyrin was used as a substrate, suggesting that it exhibited a similar effect to tween 20 and tween 40. The high emulsifying activity was also obtained when soybean oil and crude oil were used as the substrate. The amino acid composition and fatty acid composition of the biosurfactant were also analyzed. These studies, thus, could derive the development of sustaining biosurfactant benign to the environment.