



Bacillus subtilis KBKU21 shows two functions in food waste recycling system: production of optically active l-lactic acid as a monomer chemicals for bio-plastic, and plant growth promoting activity in the anaerobically-fermented compost from food waste. The photograph shows selective staining of the bacteria in the compost, observing with FITC-derivative of order Bacillales-specific 16S rRNA oligonucleotide probe, BACILIO2. With improved staining and capturing conditions (re-balance of RGB color), thick colonization of Bacillales cells around food waste residue can be clearly observed.

For more information regarding this work, read the article: **Kitpreechavanich, V. et al.**, "Simultaneous production of l-lactic acid with high optical activity and a soil amendment with food waste that demonstrates plant growth promoting activity", **J. Biosci. Bioeng.**, volume 122, issue 1, pages 105–110 (2016).

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