

A comparative study of extraction techniques for maximum recovery of β -galactosidase from the yogurt bacterium *Lactobacillus delbrueckii* ssp. *bulgaricus*

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Short title: β -galactosidase from *Lactobacillus bulgaricus*

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SUPPLEMENTARY FILE

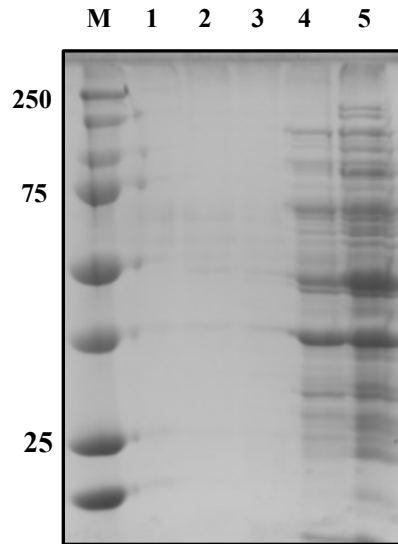


Figure S1. SDS-PAGE analysis of cell-free extract (supernatant) obtained from *L. bulgaricus* ATCC 11842. M, protein molecular weight marker. Total protein concentration ($\mu\text{g/ml}$): lane 1, unlysed cells (28.89); lane 2, chloroform (31.36); lane 3, toulene: acetone (18.95); lane 4, bead-beater (116.42); lane 5, sonicator (157.34).

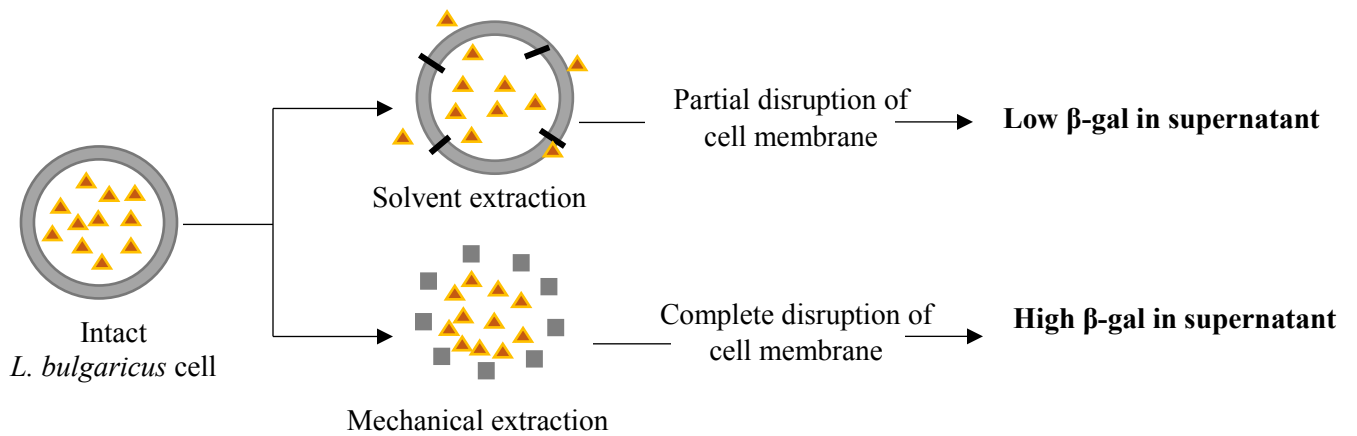


Figure S2. Schematic representation of the effect of solvent and mechanical extraction on β -gal. Mechanical disruption (sonicator; bead-beater) completely lysed the cell and released a high amount of beta-galactosidase when compared to the solvent (■ Cell wall; ▲ protein).