Figure S1. HPLC profile of chitosan hydrolysate. The hydrolysis reaction was performed to the following conditions: 0.1 mg/mL of WSC, 40 U of *Streptomyces speibonae* TKU048 chitinase, pH 7 (using 20 mM Tris HCl buffer), 50°C of temperature, and 7 days of incubation time. The condition for HPLC analysis was including NH₂-50 4E column, 70/30 (CH₃CN/potassium phosphate buffer pH 7.5) of solvent, 0.9 mL/min of flow rate, 40°C of column temperature, 20 µL of sample volume, UV detector 190 nm. The result confirms that the main monomer components of the WSC was N-acetyl-D-glucosamine (peak 1) and glucosamine (peak 2).

Figure S2. Solubility profile of WSC under different pH points.