

Thesis Title	Isolation and Characterization of Peptide Antibiotics Produced by <i>Bacillus subtilis</i>	
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## ABSTRACT

*Bacillus subtilis* NP-210, isolated from starch waste collected from Nakhon Pathom province Thailand, was used as producer for the antibacterial substances named BT 111. BT 111 were isolated from fermentation broth by precipitation with organic solvent. Further purification was achieved by PLC. HPLC analysis showed that BT 111 were a complex composed of two components. One of the components was called BT 111 A and the other was called BT 111 B. Chemical characterization of the components indicated that they were peptides. Amino acid analysis of the acid hydrolysates of BT 111 revealed the presence of glycine (Gly), glutamic acid (Glu), and Leucine (Leu). They are active against both gram-positive, and particularly gram-negative bacteria. It was partially stable to heat, and active over a wide range of pH values.