Episome profiles and mobilizable beta-lactamase plasmid in 
*Haemophilus ducreyi*

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Abstract

Chancroid caused by *Haemophilus ducreyi* has been described as a significantly predisposing factor of HIV heterosexual transmission in an endemic region of both diseases. The fastidious, *H. ducreyi* has been reported worldwide with various antimicrobial susceptibility patterns. A high tendency of drug resistances has generally been found among isolates derived in Thailand. In this study, the plasmids of *H. ducreyi* were isolated and analysed from 63 clinically derived organisms. Twenty-nine out of 63 isolates (46%) revealed the same plasmid profiles. Plasmid DNA was further cloned into Escherichia coli and transformants were selected. A 3.6 kb plasmid (pCb) carrying ampicillin resistance was subsequently identified. The pCb conferred resistance to various beta-lactam antibiotics including penicillin G, carbenicillin, piperacillin, cefazolin, cefoperazone, ampicillin-sulbactam, and amoxicillin-clavulanate but not to cefoxitin. Co-resistance to streptomycin, chloramphenicol and tetracycline was not detected. Beta-lactamase gene was located on the major pCb fragment of EcoRI and AatII cutting.

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