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Author Cheuk Hin Lau		
Title (English) <i>Pichia pastoris</i> expressing recombinant spider silk, is it possible?		
Title (Swedish)		
Abstract Native spider silk is a versatile biomaterial that is stronger than steel, tougher than Kevlar and yet very flexible. This combined with recent research showing biocompatibility with cells gives the spider silk a wider range of applications such as for biomedical applications. A total of 5 different genes (A, B, C, D, E) were cloned into <i>P. pastoris</i> , with each gene containing 4RepCT coupled to different tags. The genes were ligated to expression vectors pGAPZ α C, pGAPZ α A and pPICZ α A and were successfully transformed to <i>P. pastoris</i> . So far gene B has been successfully expressed and secreted by <i>P. pastoris</i> using the expression vector pPICZ α A.		
Keywords <i>Pichia pastoris</i> , Spider silk, Cloning, Protein expression, Purification, Protease assay		
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