Expression of Antibacterial Protein, Nuecin, Using Baculorivus Expression Vector System in Bm5 Insect Cell and *Bombyx mori*

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To practical use of nuecin protein, we tried to overexpress nuecin using Bm5 insect cell and *Bombyx mori*. We inserted nuecin cDNA into pBm10pol-Xa vector derived from *B. mori* nuclear polyhedrosis virus (BmNPV), and expressed in Bm5 cells and *B. mori*. The result of SDS-PAGE and Northern blot analysis using protein and transcript of nuecin showed when the heterologous protein is expressed by using baculovirus expression vector system (BEVS), the amount of intracellular protein is abundant, but the amount of extracellular protein is poor. As the above results, we suggest that the biologically active nuecin protein produced by using BEVS is poor because incressed level of misfolded nuecin by the strong promoter, polyhedrin and p10 of BEVS decrease the level of free chaperons and foldases by binding them.