

Production of Recombinant Endostatin from Stably Transformed *Trichoplusia ni* BTI Tn 5B1-4 Cells and *Bombyx mori* BmN Cells

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The recombinant plasmids harboring a heterologous gene coding mouse endostatin were transfected and expressed stably in *Trichoplusia ni* BTI Tn 5B1-4 (Tn 5B1-4) cells and *Bombyx mori* BmN cells, respectively. Recombinant endostatin expressed in the stably transformed Tn 5B1-4 and BmN cells was secreted into the medium. In the time-course of two lepidoptera cell lines, BmN cells is relatively lower maximum cell growth and production of recombinant endostatin than Tn 5B 1-4 cells. Recombinant endostatin was also purified to homogeneity using a simple one-step Ni²⁺ affinity fractionation method. Purified recombinant endostatin inhibited endothelial cell proliferation in a dose-dependent manner. The concentration at half-maximum inhibition (ED₅₀) for recombinant endostatin was approximately 0.35 μg/ml. In a T-flask, the stably transformed Tn 5B1-4 cells produced 14.3mg recombinant endostatin/liter at 6 days of cultivation.