Use of the Regulated Secretory Pathway
to Ease Protein Product Recovery in Animal Cell Culture

by

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ABSTRACT

An experimental study was performed to determine methods to improve the cloning efficiency of the BTC3 cell line prior to obtaining clonal cell lines expressing recombinant protein. Polylysine pretreatment of the substrate was found to increase colony formation along with the use of conditioned media. Using the acquired knowledge, clonal lines were obtained from the parental (nonclonal) line, as well as from mixtures of cells expressing recombinant prolactin.

Secretion experiments were carried out on the clonal lines to determine whether the recombinant prolactin could be used in a controlled secretion production scheme. Results show the recombinant prolactin to be partially sorted to the regulatory secretory pathway, however the native insulin appeared to be preferentially sorted by the cells.

Type the word ABSTRACT before the body of the text

Single-spaced summary; keep under 350 words

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