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(54) Title: NOVEL SELECTION SYSTEM

(57) Abstract: The present invention relates to a method of producing a recombinant protein comprising using a selection method other than antibiotics. In particular, it relates to a stable host/vector system based on the *pyrC* gene complementation designed to produce high level of heterologous recombinant protein in *Escherichia coli*. The expression system of the present invention allows rapid selection of plasmid containing cells during the cloning phases and lead to high protein expression during fermentation. This system has a strong selective efficiency, especially during the induction phase, leading to the selection of an almost homogeneous and stable plasmid bearing cell population. Moreover the productivity of the culture is to a large extent better than the one based on antibiotic resistance. This elevated vector stability combined with its high productivity fulfils the requirements for heterologous protein production in *Escherichia coli* to an industrial level.

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