Abstract

METHOD FOR HIGHLY EXPRESSING RECOMBINANT PROTEIN OF ENGINEERING BACTERIA AND USE THEREOF

Provided are methods for highly expressing recombinant protein of engineering bacteria and the use thereof. The method comprises the following steps: (1) engineering bacteria of Escherichia coli with pET system are transfected with recombinant mutated plasmid to obtain positive monoclonal colonies; (2) the positive monoclonal colonies are enriched to obtain a seed bacteria solution, and the seed bacteria solution is induced to enrichment and growth in a large amount; and (3) the bacteria supernatant containing the recombinant protein as the expression target is separated, and then the recombinant protein in the bacteria supernatant is extracted and purified. The method is characterized in that the engineering bacteria of Escherichia coli with pET system are *E. coli* B834 (DE3). The components of the mass enrichment medium and the protein purification steps are also optimized such that a significant improvement in the yield and purity of the protein is achieved and the method is suitable for applying to the large-scale production of recombinant protein expressed by the engineering bacteria of Escherichia coli.

Fig. 3