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INCREASING OF THE EXPRESSION OF RECOMBINANT scFv-ANTIBODIES EFFICIENCY

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Obtaining single-chain variable fragments (scFv) of recombinant antibodies in *E. coli* cells is often associated with numerous problems causing low yields or inactive conformation of the product.

The aim of this work was to study the influence of staphylococcal protein A fragment fused with scFv antibodies (SpA-tag) on the efficiency of expression of final product. Examination of scFv antibodies of different origin and specificity has shown that in similar expression systems fused scFv is synthesized in much higher quantities than free scFv. Furthermore, the scFv antibodies in fused form retained their antigen-binding properties and the SpA fragment the ability to bind other immunoglobulins.

Thus, the proposed strategy can be considered effective in improving the efficiency of scFv-antibodies production in *E. coli* cells.

**Key words**: scFv-antibodies, protein A *Staphylococcus aureus*, chimeric proteins, *E. coli*.

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{spoiler title=References}

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