

ABSTRACT

The invention relates to methods of increasing the titre of a protein of interest in a cell as well as the improved production and purification of optimised biomolecules, one
5 component of which is the domain C_H3. A frequently observed effect in biomolecules is the cleaving of the C-terminal amino acid(s), e.g. the C-terminal lysine. The usually incomplete processing of the heavy chain of antibodies for example leads to product heterogeneity. To prevent this product heterogeneity the corresponding codon of the C-terminal lysine of the heavy antibody chain has been deleted by recombinant DNA
10 technology. These optimised antibodies lead to a product titre which is higher than in the wild-type. In addition, they prove advantageous during purification by having better elution characteristics as a result of the reduced charge heterogeneity.