

**METHOD FOR INCREASING THE SECRETION LEVELS OF INTERLEUKIN 2 AND
PROTEINS DERIVED FROM IT**

ABSTRACT

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The present invention relates to the field of Biotechnology, particularly to a method based on the introduction of a single mutation in the genes encoding the human IL-2 and the muteins derived thereof that results in increased secretion levels in different hosts without affecting their biological functions. In particular, these mutations are based on a non-conservative change in the amino acid located in position 35 in the primary sequence of human IL-2, preferably the substitutions are K35E, K35D and K35Q. Another object of the present invention are the expression systems used to obtain both the recombinant human IL-2 and the muteins derived thereof using the method described in this invention. The above-mentioned method is useful to improve the production efficiency of the recombinant human IL-2 and the muteins derived thereof both at laboratory and industrial scales. The proteins obtained using this method can be used for therapeutic purposes as well as in the *in vitro* expansion of T cells for adoptive transfer therapies.

20 (Figure 2)