

CLAIMS

1. A method for increasing the secretion levels of recombinant human IL-2 and its derived muteins in a host, without the selective modulation of its interactions with the receptor subunits and that is characterized by the introduction of a single non-conservative mutation at position 35 of its primary sequence selected from the group consisting of:
- K35E,
 - K35D and
 - 10 - K35Q,
- and wherein said muteins are selected from the group consisting of:
- SEQ ID NO. 4,
 - SEQ ID NO. 5,
 - SEQ ID NO. 6,
 - 15 SEQ ID NO. 8,
 - SEQ ID NO. 9,
 - SEQ ID NO. 10,
 - SEQ ID NO. 11,
 - SEQ ID NO. 12,
 - 20 SEQ ID NO. 13,
 - SEQ ID NO. 14,
 - SEQ ID NO. 15,
 - SEQ ID NO. 16,
 - SEQ ID NO. 17 and
 - 25 SEQ ID NO. 18.
2. The method according to claim 1 wherein the recombinant human IL-2 and the muteins derived thereof are fused to any of the proteins selected from the group comprising:
- capsid proteins of the filamentous phages,
 - 30 - albumin

- Fc region of the antibodies,
 - complete antibodies and
 - antibody fragments including their variable domains.
- 5 3. The method according to any of the claims 1-2 wherein the host is selected from the group comprising:
- *E. coli*,
 - mammalian cells and
 - yeasts.

- 4 Use of the method according to claim 3 at the laboratory or industrial scale.