

INTERLEUKIN-2 DERIVATIVE

ABSTRACT

Disclosed is an IL-2 derivative. By introducing at least one cysteine residue based on wild-type IL-2, the binding plane of the IL-2 derivative and α receptor subunit is partially or completely blocked, while the affinity of the IL-2 derivative to the complex of β and γ receptor subunits is basically retained. -A complex is also disclosed, which comprises: an IL-2 derivative, which is introduced with a third cysteine residue based on wild-type IL-2; and a blocking module, which has or is introduced with a fourth cysteine residue; wherein the third cysteine residue on the IL-2 derivative and the fourth cysteine residue on the blocking module are capable of forming an intermolecular disulfide bond, thereby forming a complex of the IL-2 derivative and the blocking module; and wherein the binding plane of the IL-2 derivative and α receptor subunit is partially or completely blocked, while the affinity of the IL-2 derivative to the complex of β and γ receptor subunits is basically retained.

Figure 4