

Title (en)

CYTOKINES WITH AN UNPAIRED CYSTEINE RESIDUE AND CONJUGATES THEREOF.

Title (de)

CYTOKINE MIT EINEM UNGEPAARTEN CYSTEIN-REST UND KONJUGATEN DAVON.

Title (fr)

CYTOKINES DOTEES D'UN RESIDU DE CYSTEINE NON APPARIE ET LEURS PRODUITS DE CONJUGAISON.

Publication

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Application

EP 93901259 A 19921210

Priority

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Abstract (en)

[origin: WO9312142A1] Disclosed are cytokines which are site-specifically mutated to have one unpaired cysteine residue located apart from the receptor-binding site, and conjugates thereof, in particular, conjugates where a lipophilic group is conjugated to the unpaired cysteine residue, and to such conjugates of cytokines which have an unpaired cysteine residue located apart from the receptor-binding site in the native form. All of these cytokines are of the type such that conjugation of a lipophilic group to the unpaired cysteine residue does not significantly affect the receptor binding or biological activity of the conjugated product. Also disclosed are conjugates where a lipophilic group, an antibody, horseradish peroxidase, alkaline phosphatase, fluorescein substances, biotin, or a cytotoxin is conjugated to the unpaired cysteine residue. These fatty acyl conjugated cytokines penetrate better and are retained longer in local sites and can be locally administered to treat, e.g., solid tumors, spinal injuries, the external genital area, the throat, ears, nasal linings, eyes, and skin.

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Citation (search report)

- [XY] EP 0458064 A2 19911127 - AMERICAN CYANAMID CO [US]
- [XY] WO 9012874 A2 19901101 - GENETICS INST [US]
- [Y] EP 0236987 A2 19870916 - TAKEDA CHEMICAL INDUSTRIES LTD [JP]
- [Y] EP 0354992 A2 19900221 - YEDA RES & DEV [IL]
- [Y] WO 9112229 A1 19910822 - CA NAT RESEARCH COUNCIL [CA]
- [Y] EP 0441765 A1 19910814 - UNIV WASHINGTON [US]
- [Y] EP 0105777 A1 19840418 - CENTRE NAT RECH SCIENT [FR]
- [DY] WILCOX ET AL: "THE MAJORITY OF CELLULAR FATTY ACID ACYLATED PROTEINS ARE LOCALIZED TO THE CYTOPLASMIC SURFACE OF THE PLASMA MEMBRANE", BIOCHEMISTRY, vol. 26, 1987, WASHINGTON D.C.,USA, pages 1029 - 1036
- See references of WO 9312142A1

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