

EXHIBIT K

105-52
105

Patent
#30
PATENT
10/19/94

IN THE UNITED STATES
PATENT AND TRADEMARK OFFICE

Applicant: LIN, Fu-Kuer

Serial No.: 08/202,874

Filed: February 28, 1994

For:

PRODUCTION OF ERYTHROPOIETIN

Group Art Unit: 1812

Examiner: D. Fitzgerald

) I hereby certify that this paper is
) being transmitted via facsimile to:
) Hon. Commissioner of Patents and
) Trademarks, Washington, D.C. 20231
) on this date:

) June 13, 1994

) Greta E. Noland

) Greta E. Noland

) Registration No. 35,302

) Agent for Applicant

BP
6/13/94
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PRELIMINARY AMENDMENT

Hon. Commissioner of
Patents and Trademarks
Washington, D.C. 20231

Sir:

Please enter the following amendments.

In the Claims

Cancel claims 76-83 without prejudice.

Add the following claims 84-94

84. An erythropoietin glycoprotein product having *in vivo* biological activity and having glycosylation which differs from that of human urinary erythropoietin.

88. A glycoprotein product of the expression in a eucaryotic host cell of an exogenous DNA sequence comprising a DNA sequence encoding human erythropoietin said product possessing the *in vivo* biological property of causing human bone marrow cells to increase production of reticulocytes and red blood cells.

Rule 166 II
PART III

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⁸⁹
~~86~~ The *in vivo* biologically active human erythropoietin glycoprotein product of the process comprising the steps of:

(a) growing, under suitable nutrient conditions, mammalian host cells transformed or transfected with an isolated DNA sequence encoding the human erythropoietin amino acid sequence set out in FIG 6 or a fragment thereof; and

(b) isolating a glycosylated erythropoietin polypeptide therefrom.

⁹⁰
~~87~~ The *in vivo* biologically active human erythropoietin glycoprotein product of the process comprising the steps of:

(a) growing, under suitable nutrient conditions, mammalian host cells transformed or transfected with an isolated DNA sequence comprising a sequence encoding the signal sequence of human erythropoietin set out in FIG 6; and

(b) isolating a glycosylated erythropoietin polypeptide therefrom.

⁹¹
~~88~~ A glycoprotein product according to claim ~~86~~ wherein the exogenous DNA sequence is a cDNA sequence.

⁹²
~~89~~ A glycoprotein product according to claim ~~86~~ wherein the exogenous DNA sequence is a genomic DNA sequence.

⁹³
~~90~~ A glycoprotein product according to claim ~~86, 87, 88 or 89~~ wherein the host cell is a non-human mammalian cell.

⁹⁴
~~91~~ A glycoprotein product according to claim ~~90~~ wherein the non-human mammalian cell is a CHO cell.

⁹⁵
~~92~~ A pharmaceutical composition comprising an effective amount of a glycoprotein product according to claim ~~84, 85, 86 or 87~~ and a pharmaceutically acceptable diluent, adjuvant or carrier.

III
Amended

Re: 126

Part III 4

Form 101

⁹⁶
95. A method for providing erythropoietin therapy to mammal comprising administering an effective amount of a pharmaceutical composition of claim ⁹⁵ 92.

⁹⁷
96. A method according to claim ⁹⁶ 95 wherein the therapy comprises enhancing hematocrit levels.

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Respectfully submitted,

MARSHALL, O'TOOLE, GERSTEIN,
MURRAY & BORUN
6300 Sears Tower
233 South Wacker Drive
Chicago, Illinois 60606-6402
(312) 474-6300

By: Greta E. Noland
Greta E. Noland
Registration No.: 35,302

June 13, 1994