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(54) Title: METHODS FOR EXPRESSION AND PURIFICATION OF RECOMBINANT HUMAN GROWTH HORMONE

(57) Abstract: The present invention relates generally to the production, purification, and isolation of human growth hormone (hGH). More particularly, the invention relates to the production, purification, and isolation of substantially purified hGH from recombinant host cells or culture medium including, for example, yeast, insect, mammalian and bacterial host cells. The process of the present invention is also useful for purification of hGH linked to polymers or other molecules.

INTERNATIONAL SEARCH REPORT

International application No.

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A. CLASSIFICATION OF SUBJECT MATTER IPC(8) - C12N 15/09; A23J 1/00 (2008.04) USPC - 435/69.4; 530/412 According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) USPC: 435/69.4; 530/412 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched USPC: 435/41, 69.1, 70.1, 70.3, 71.1, 170; 530/350, 399, 416; 536/23.5 Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) PubWest: PGPB, USPT, USOC, EPAB, JPAB; Google Scholar; Google Patents; text: hGH; human growth hormone; culture; purifying; inducing; producing; non-naturally occurring amino acid; eukaryote; prokaryote; medium (media); liquid; chromatography; anion; ion; HIC; hydrophobic interaction; hydroxyapatite; polyethylene glycol; PEG		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6,160,089 A (HONJO et al.) 12 December 2000 (12.12.2000). col 1, ln 5-19; col 11, ln 34-35; abstract; col 10, ln 43; col 3, ln 66-67; col 4, ln 37-44	1-12
Y	US 2004/0038242 A1 (EDMONDS et al.) 26 February 2004 (26.02.2004). para [0094]; para [0095]; para [0002]; para [0143]; para [0306]; para [0297]; para [0296]	1-12
Y	US 5,262,322 A (LIU et al.) 16 November 1993 (16.11.1993). col 31, ln 45-56; col 18, ln 35-36	8, 10
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Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201		Authorized officer: Lee W. Young PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774