



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<b>(51) International Patent Classification <sup>5</sup> :</b> <b>C12N 15/12, C07K 3/22</b> <b>C12N 15/62</b>	<b>A3</b>	<b>(11) International Publication Number: WO 93/23540</b> <b>(43) International Publication Date: 25 November 1993 (25.11.93)</b>
<b>(21) International Application Number:</b> PCT/US93/04752 <b>(22) International Filing Date:</b> 19 May 1993 (19.05.93)  <b>(30) Priority data:</b> 07/885,501                      19 May 1992 (19.05.92)                      US  <b>(71) Applicant:</b> XOMA CORPORATION [US/US]; 2910 Seventh Street, Berkeley, CA 94710 (US). <b>(72) Inventor:</b> GRINNA, Lynn, S. ; Hidden in the Oaks, P.O. Box 2260, Middleburgh, VA 22117 (US). <b>(74) Agent:</b> MEYERS, Thomas, C.; Marshall, O'Toole, Gerstein, Murray & Borun, 6300 Sears Tower, 233 South Wacker Drive, Chicago, IL 60606 (US).	<b>(81) Designated States:</b> AT, AU, BB, BG, BR, CA, CH, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).  <b>Published</b> <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>  <b>(88) Date of publication of the international search report:</b> 20 January 1994 (20.01.94)	
<b>(54) Title:</b> IMPROVED METHODS FOR THE PREPARATION OF ENDOTOXIN-BINDING PROTEINS		
<b>(57) Abstract</b>		
<p>Disclosed are improvements in methods for the isolation of endotoxin-binding proteins which are secreted by transfected host cells in appropriate cell culture media. In its preferred embodiment, the invention comprises addition of a cation exchange material to the media as the means of increasing the yield of recombinant endotoxin-binding proteins, such as bactericidal/permeability-increasing protein and lipopolysaccharide-binding protein.</p>		

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 93/04752

<b>I. CLASSIFICATION OF SUBJECT MATTER</b> (if several classification symbols apply, indicate all) <sup>6</sup>		
According to International Patent Classification (IPC) or to both National Classification and IPC Int.Cl. 5 C12N15/12; C07K3/22; C12N15/62		
<b>II. FIELDS SEARCHED</b>		
Minimum Documentation Searched <sup>7</sup>		
Classification System	Classification Symbols	
Int.Cl. 5	C07K ; C12N	
Documentation Searched other than Minimum Documentation to the Extent that such Documents are Included in the Fields Searched <sup>8</sup>		
<b>III. DOCUMENTS CONSIDERED TO BE RELEVANT<sup>9</sup></b>		
Category <sup>o</sup>	Citation of Document, <sup>11</sup> with indication, where appropriate, of the relevant passages <sup>12</sup>	Relevant to Claim No. <sup>13</sup>
X	WO,A,9 203 535 (INCYTE PHARMACEUTICALS) 5 March 1992 see page 30, line 18 - page 31, line 2 see page 43, line 27 - page 44, line 8 see claims 6-8	1,3,4,9
Y	--- INFECTION AND IMMUNITY vol. 54, no. 1, October 1986, WASHINGTON DC, USA pages 142 - 148 C. HOVDE ET AL. 'Characterization of a protein of normal human polymorphonuclear leukocytes with bactericidal activity against Pseudomonas aeruginosa.' see abstract --- -/--	1,2,4,6, 9
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<b>IV. CERTIFICATION</b>		
Date of the Actual Completion of the International Search	Date of Mailing of this International Search Report	
25 OCTOBER 1993	23 -11- 1993	
International Searching Authority	Signature of Authorized Officer	
EUROPEAN PATENT OFFICE	NOOIJ F.J.M.	

III. DOCUMENTS CONSIDERED TO BE RELEVANT (CONTINUED FROM THE SECOND SHEET)		
Category °	Citation of Document, with indication, where appropriate, of the relevant passages	Relevant to Claim No.
Y	WO,A,8 905 157 (INVITRON CORPORATION) 15 June 1989 cited in the application see claims	1,2,4,6, 9
A	WO,A,8 912 644 (ASSOCIATES OF CAPE COD, INC.) 28 December 1989 see claims 1,8-11	1-3,9

**ANNEX TO THE INTERNATIONAL SEARCH REPORT  
ON INTERNATIONAL PATENT APPLICATION NO.**

US 9304752  
SA 75110

This annex lists the patent family members relating to the patent documents cited in the above-mentioned international search report. The members are as contained in the European Patent Office EDP file on  
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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		AU-A- 8850191	17-03-92
		EP-A- 0544832	09-06-93
		US-A- 5234912	10-08-93
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82