Title: PEPTIDES AS SOLUBILIZING EXCIPIENTS FOR TRANSFORMING GROWTH FACTOR 8 PROTEINS

Abstract: The present invention relates to compositions comprising excipients or solubilizing agents for proteins. The invention relates to the discovery that a peptide derived from the N-terminus extension of the T266 isoform of rhBMP2 has properties that enhance the solubility of proteins. The invention also relates to methods of resolubilizing a protein that has precipitated, by contacting the protein with a peptide comprised of the 17 amino acid extension of the T266 isoform of rhBMP-2. The invention also relates to methods of increasing the solubility of a protein by contacting the protein with a peptide comprised of the 17 amino acid extension of the T266 isoform of rhBMP-2.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER
IPC(7) : A61K 38/07, 38/08, 38/10, 38/18; C07K 5/00, 7/00, 14/495, 14/51
US CL : 514/12, 13, 14, 16, 18; 530/326, 327, 329, 330, 350
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)
U.S. : 514/12, 13, 14, 16, 18; 530/326, 327, 329, 330, 350

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>US 5,413,914 A (FRANZUSOFF) 09 May 1995 (09.05.1995), column 33, full paragraph</td>
<td>1-9, 28-36, 62-70, 89-97</td>
</tr>
<tr>
<td>A</td>
<td>US 5,922,846 A (CERLETTI et al) 13 July 1999 (13.06.1999)</td>
<td>1-105</td>
</tr>
</tbody>
</table>

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

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Date of the actual completion of the international search 20 October 2004 (20.10.2004)
Date of mailing of the international search report 26 OCT 2004

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Form PCT/ISA/210 (second sheet) (July 1998)
Continuation of B. FIELDS SEARCHED Item 3:
APS, MEDLINE
search terms: BMP, TGF-beta