

Title (en)  
GEL-FORMING POLYPEPTIDES

Title (de)  
GELBILDENDE POLYPEPTIDE

Title (fr)  
POLYPEPTIDES DE FORMATION DE GEL

Publication  
**EP 3764988 A4 20220420 (EN)**

Application  
**EP 19768400 A 20190314**

Priority  
• US 201862643593 P 20180315  
• US 2019022275 W 20190314

Abstract (en)  
[origin: WO2019178359A1] Stable aqueous gel or semisolid gel pharmaceutical composition comprising a gel-forming and water-soluble peptide are optionally combined with an appropriate excipient and a therapeutic agent. The pharmaceutical composition forms a gel depot following administration to an individual, where the gel nanostructure releases the peptide or the encapsulated therapeutic agent(s) over an extended period of time. The gel-forming compounds can be formulated in aqueous, suspension, or solid formulations, comprising 0.01 % to 99% of a gel-forming polypeptide by weight with relation to the total weight of the formulation. These formulations are useful in drug delivery and as implantable drug depot for long term delivery of therapeutic agents, antigens, or cells. Also provided are methods of producing a gel-forming compound, through the modification of a chemical compound with a gel-forming enhancing motif.

IPC 8 full level  
**C07K 14/575** (2006.01); **A61K 9/00** (2006.01); **A61K 9/06** (2006.01); **A61K 38/16** (2006.01); **A61K 47/42** (2017.01); **C07K 7/06** (2006.01); **C07K 14/47** (2006.01); **C07K 14/585** (2006.01); **C12P 21/02** (2006.01)

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Citation (search report)  
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• [XA] US 5958877 A 19990928 - WIMALAWANSA SUNIL J [US]  
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• [XA] ELGERSMA RONALD C. ET AL: "Synthesis and structural investigations of N-alkylated [beta]-peptidosulfonamide-peptide hybrids of the amyloidogenic amylin(20-29) sequence: implications of supramolecular folding for the design of peptide-based bionanomaterials", ORGANIC & BIOMOLECULAR CHEMISTRY, vol. 4, no. 19, 1 January 2006 (2006-01-01), pages 3587 - 3597, XP055866902, ISSN: 1477-0520, DOI: 10.1039/B606875H  
• [A] SUTTER ET AL: "Recombinant gelatin hydrogels for the sustained release of proteins", JOURNAL OF CONTROLLED RELEASE, ELSEVIER, AMSTERDAM, NL, vol. 119, no. 3, 22 May 2007 (2007-05-22), pages 301 - 312, XP022087330, ISSN: 0168-3659, DOI: 10.1016/J.JCONREL.2007.03.003  
• See references of WO 2019178359A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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